



SEQUENCE LISTING

<110> Blumenfeld, Marta
Bougueleret, Lydie
Chumakov, Ilya

<120> Polymorphic Markers of Prostate Carcinoma Tumor Antigen-1 (PCTA-1)

<130> GEN-T112XC1

<140> 09/326,402

<141> 1999-06-04

<150> 60/088,187

<151> 1998-06-05

<150> 60/102,324

<151> 1998-09-28

<160> 22

<170> PatentIn version 3.1

<210> 1

<211> 106746

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> 1..68647

<223> 5'regulation region

<221> misc_feature

<222> 66647..68647

<223> promoter

<221> misc_feature

<222> 97156..106746

<223> 3'regulation region

<221> exon

<222> 68648..68741

<223> exon0

<221> exon

<222> 70647..70794

<223> exon1

<221> exon

<222> 82208..82296

<223> exon2

<221> exon

<222> 83613..83823
<223> exon3

<221> exon
<222> 85298..85417
<223> exon4

<221> exon
<222> 86389..86445
<223> exon5

<221> exon
<222> 87496..87522
<223> exon6

<221> exon
<222> 87650..87775
<223> exon6bis

<221> exon
<222> 88295..88383
<223> exon7

<221> exon
<222> 89484..89649
<223> exon8

<221> exon
<222> 92749..97155
<223> exon9

<221> exon
<222> 92749..92883
<223> exon9bis

<221> exon
<222> 95821..97155
<223> exon9ter

<221> misc_feature
<222> 70647..70794
<223> homology with genset EST : A241850

<221> misc_feature
<222> 68648..68741
<223> homology with genset EST : A241850

<221> misc_feature
<222> 82208..82229
<223> homology with genset EST : A241850

<221> allele
<222> 278
<223> 99-1601-278 : polymorphic base A or C

<221> allele
<222> 402
<223> 99-1601-402 : polymorphic base A or T

<221> allele
<222> 472
<223> 99-1601-472 : polymorphic base A or T

<221> allele
<222> 2955
<223> 99-13801-100 : polymorphic base T or C

<221> allele
<222> 12167
<223> 99-13806-166 : polymorphic base G or A

<221> allele
<222> 12536
<223> 99-13799-376 : polymorphic base T or G

<221> allele
<222> 17593
<223> 99-13798-297 : polymorphic base T or C

<221> allele
<222> 17606
<223> 99-13798-284 : polymorphic base T or C

<221> allele
<222> 22079
<223> 99-1602-200 : polymorphic base G or C

<221> allele
<222> 28964
<223> 99-13794-186 : polymorphic base T or C

<221> allele
<222> 29003
<223> 99-13794-147 : polymorphic base C or G

<221> allele
<222> 31077
<223> 99-13812-384 : polymorphic base T or C

<221> allele
<222> 31766
<223> 99-13805-313 : polymorphic base T or C

<221> allele
<222> 34791
<223> 99-1587-281 : polymorphic base A or G

<221> allele
<222> 45751
<223> 99-1582-430 : polymorphic base C or T

<221> allele
<222> 49847
<223> 99-1585-465 : polymorphic base T or C

<221> allele
<222> 49855
<223> 99-1585-457 : polymorphic base T or C

<221> allele
<222> 49886
<223> 99-1585-426 : polymorphic base G or A

<221> allele
<222> 49900
<223> 99-1585-412 : polymorphic base G or A

<221> allele
<222> 49906
<223> 99-1585-406 : polymorphic base C or A

<221> allele
<222> 49921
<223> 99-1585-391 : polymorphic base C or A

<221> allele
<222> 49939
<223> 99-1585-373 : polymorphic base G or A

<221> allele
<222> 50256
<223> 99-1585-55 : polymorphic base C or A

<221> allele
<222> 54955
<223> 99-1607-373 : polymorphic base T or C

<221> allele
<222> 64239
<223> 99-1577-105 : polymorphic base A or G

<221> allele
<222> 65436
<223> 99-1591-235 : polymorphic base A or G

<221> allele
<222> 65496
<223> 99-1591-295 : polymorphic base G or T

<221> allele
<222> 66967
<223> 99-1572-315 : polymorphic base C or T

<221> allele
<222> 66987

<223> 99-1572-335 : polymorphic base A or G

<221> allele

<222> 67092

<223> 99-1572-440 : polymorphic base C or T

<221> allele

<222> 67129

<223> 99-1572-477 : polymorphic base A or T

<221> allele

<222> 67229

<223> 99-1572-578 : polymorphic base C or T

<221> allele

<222> 67433

<223> 5-264-188 : polymorphic base A or G

<221> allele

<222> 67723

<223> 5-169-97 : polymorphic base G or C

<221> allele

<222> 67834

<223> 5-169-208 : polymorphic base A or G

<221> allele

<222> 67955

<223> 5-169-331 : polymorphic base C or T

<221> allele

<222> 68213

<223> 5-170-238 : polymorphic base A or G

<221> allele

<222> 68263

<223> 5-170-288 : polymorphic base A or C

<221> allele

<222> 68375

<223> 5-170-400 : polymorphic base G or C

<221> allele

<222> 68477

<223> 5-171-156 : polymorphic base G or T

<221> allele

<222> 68525

<223> 5-171-204 : polymorphic base C or T

<221> allele

<222> 68594

<223> 5-171-273 : polymorphic base A or G

<221> allele

<222> 68610
<223> 5-171-289 : polymorphic base C or T

<221> allele
<222> 70566
<223> 5-1-60 : polymorphic base C or T

<221> allele
<222> 70728
<223> 5-1-222 : polymorphic base A or G

<221> allele
<222> 80038
<223> 99-1578-99 : polymorphic base G or T

<221> allele
<222> 80118
<223> 99-1578-179 : polymorphic base A or T

<221> allele
<222> 80170
<223> 99-1578-231 : insertion AC

<221> allele
<222> 80183
<223> 99-1578-245 : deletion AT

<221> allele
<222> 80435
<223> 99-1578-496 : polymorphic base C or T

<221> allele
<222> 82090
<223> 5-2-30 : insertion CAG

<221> allele
<222> 82165
<223> 5-2-109 : polymorphic base G or T

<221> allele
<222> 82169
<223> 5-2-113 : deletion GTTT

<221> allele
<222> 82218
<223> 5-2-162 : polymorphic base A or T

<221> allele
<222> 82234
<223> 5-2-178 : polymorphic base C or T

<221> allele
<222> 82268
<223> 5-2-213 : polymorphic base C or T

<221> allele
<222> 82393
<223> 99-1605-112 : polymorphic base T or C

<221> allele
<222> 83587
<223> 5-3-27 : polymorphic base A or G

<221> allele
<222> 83643
<223> 5-3-83 : polymorphic base C or T

<221> allele
<222> 83644
<223> 5-3-84 : polymorphic base A or G

<221> allele
<222> 83808
<223> 5-3-248 : polymorphic base A or G

<221> allele
<222> 83881
<223> 5-3-321 : polymorphic base G or T

<221> allele
<222> 83884
<223> 5-3-324 : polymorphic base C or T

<221> allele
<222> 83909
<223> 5-4-313 : polymorphic base A or G

<221> allele
<222> 83937
<223> 5-3-377 : insertion TTG

<221> allele
<222> 83947
<223> 5-4-351 : polymorphic base C or T

<221> allele
<222> 83982
<223> 5-4-386 : polymorphic base A or G

<221> allele
<222> 83988
<223> 5-4-392 : polymorphic base GGG or TA

<221> allele
<222> 84047
<223> 5-260-255 : polymorphic base C or T

<221> allele
<222> 84092
<223> 5-260-300 : polymorphic base C or T

<221> allele
<222> 84145
<223> 5-260-353 : polymorphic base C or T

<221> allele
<222> 85202
<223> 5-9-50 : polymorphic base C or T

<221> allele
<222> 86259
<223> 5-5-21 : polymorphic base A or G

<221> allele
<222> 86323
<223> 5-5-85 : polymorphic base TATAAAATATT or ACAGGTTATATA

<221> allele
<222> 87713
<223> 5-202-95 : polymorphic base G or T

<221> allele
<222> 87735
<223> 5-202-117 : polymorphic base A or T

<221> allele
<222> 87787
<223> 5-202-169 : polymorphic base A or C

<221> allele
<222> 87806
<223> 5-202-188 : polymorphic base A or G

<221> allele
<222> 87860
<223> 5-202-242 : polymorphic base A or G

<221> allele
<222> 87902
<223> 5-202-284 : polymorphic base C or T

<221> allele
<222> 87980
<223> 5-202-362 : deletion CC

<221> allele
<222> 88012
<223> 5-202-394 : polymorphic base C or T

<221> allele
<222> 88215
<223> 5-7-113 : polymorphic base C or T

<221> allele
<222> 88283

<223> 5-7-181 : polymorphic base G or C

<221> allele
<222> 88297
<223> 5-7-195 : polymorphic base G or C

<221> allele
<222> 88442
<223> 5-7-340 : polymorphic base C or T

<221> allele
<222> 88471
<223> 5-7-369 : polymorphic base A or T

<221> allele
<222> 88480
<223> 5-7-378 : polymorphic base C or T

<221> allele
<222> 89394
<223> 5-181-57 : polymorphic base A or G

<221> allele
<222> 89464
<223> 5-181-127 : polymorphic base C or T

<221> allele
<222> 89471
<223> 5-181-134 : polymorphic base C or T

<221> allele
<222> 89658
<223> 5-181-321 : polymorphic base A or C

<221> allele
<222> 92760
<223> 5-10-39 : polymorphic base C or T

<221> allele
<222> 93023
<223> 5-10-302 : polymorphic base A or G

<221> allele
<222> 93055
<223> 5-10-334 : polymorphic base A or C

<221> allele
<222> 93247
<223> 5-11-158 : polymorphic base A or G

<221> allele
<222> 93319
<223> 5-11-230 : polymorphic base G or T

<221> allele

<222> 93323
<223> 5-11-234 : polymorphic base C or T

<221> allele
<222> 93388
<223> 5-11-299 : polymorphic base A or T

<221> allele
<222> 93393
<223> 5-11-304 : polymorphic base A or C

<221> allele
<222> 93418
<223> 5-11-329 : polymorphic base C or T

<221> allele
<222> 93515
<223> 5-12-56 : insertion CTTT

<221> allele
<222> 93726
<223> 5-12-267 : polymorphic base A or C

<221> allele
<222> 93903
<223> 5-13-145 : polymorphic base C or T

<221> allele
<222> 94170
<223> 5-14-44 : polymorphic base C or T

<221> allele
<222> 94218
<223> 5-14-93 : polymorphic base A or T

<221> allele
<222> 94269
<223> 5-14-144 : insertion T

<221> allele
<222> 94290
<223> 5-14-165 : polymorphic base C or T

<221> allele
<222> 94422
<223> 5-14-297 : polymorphic base A or C

<221> allele
<222> 94432
<223> 5-14-307 : polymorphic base G or T

<221> allele
<222> 94720
<223> 5-15-219 : polymorphic base A or T

<221> allele
<222> 94989
<223> 5-16-157 : polymorphic base A or G

<221> allele
<222> 95261
<223> 5-17-140 : polymorphic base A or G

<221> allele
<222> 95340
<223> 5-18-51 : polymorphic base G or T

<221> allele
<222> 95497
<223> 5-18-208 : polymorphic base A or C

<221> allele
<222> 95770
<223> 5-300-238 : polymorphic base C or T

<221> allele
<222> 95819
<223> 5-300-287 : polymorphic base A or G

<221> allele
<222> 96145
<223> 5-262-49 : insertion C

<221> allele
<222> 96181
<223> 5-262-85 : polymorphic base C or T

<221> allele
<222> 96350
<223> 5-262-254 : polymorphic base C or T

<221> allele
<222> 96951
<223> 5-263-404 : polymorphic base C or T

<221> allele
<222> 97144
<223> 5-265-244 : polymorphic base A or G

<221> allele
<222> 97276
<223> 5-265-376 : polymorphic base A or G

<221> allele
<222> 102267
<223> 99-7183-338 : polymorphic base C or T

<221> allele
<222> 105937
<223> 99-7207-138 : polymorphic base A or G

<221> misc_binding
<222> 258..277
<223> 99-1601-278.mis1

<221> misc_binding
<222> 279..298
<223> 99-1601-278.mis2 complement

<221> misc_binding
<222> 382..401
<223> 99-1601-402.mis1

<221> misc_binding
<222> 403..422
<223> 99-1601-402.mis2 complement

<221> misc_binding
<222> 452..471
<223> 99-1601-472.mis1

<221> misc_binding
<222> 473..492
<223> 99-1601-472.mis2 complement

<221> misc_binding
<222> 2935..2954
<223> 99-13801-100.mis2

<221> misc_binding
<222> 2956..2975
<223> 99-13801-100.mis1 complement

<221> misc_binding
<222> 12147..12166
<223> 99-13806-166.mis2

<221> misc_binding
<222> 12168..12187
<223> 99-13806-166.mis1 complement

<221> misc_binding
<222> 12516..12535
<223> 99-13799-376.mis2

<221> misc_binding
<222> 12537..12556
<223> 99-13799-376.mis1 complement

<221> misc_binding
<222> 17573..17592
<223> 99-13798-297.mis2

<221> misc_binding
<222> 17594..17613

<223> 99-13798-297.mis1 complement

<221> misc_binding

<222> 17586..17605

<223> 99-13798-284.mis2

<221> misc_binding

<222> 17607..17626

<223> 99-13798-284.mis1 complement

<221> misc_binding

<222> 22059..22078

<223> 99-1602-200.mis1

<221> misc_binding

<222> 22080..22099

<223> 99-1602-200.mis2 complement

<221> misc_binding

<222> 28944..28963

<223> 99-13794-186.mis2

<221> misc_binding

<222> 28965..28984

<223> 99-13794-186.mis1 complement

<221> misc_binding

<222> 28983..29002

<223> 99-13794-147.mis2

<221> misc_binding

<222> 29004..29023

<223> 99-13794-147.mis1 complement

<221> misc_binding

<222> 31057..31076

<223> 99-13812-384.mis2

<221> misc_binding

<222> 31078..31097

<223> 99-13812-384.mis1 complement

<221> misc_binding

<222> 31746..31765

<223> 99-13805-313.mis2

<221> misc_binding

<222> 31767..31786

<223> 99-13805-313.mis1 complement

<221> misc_binding

<222> 34771..34790

<223> 99-1587-281.mis1

<221> misc_binding

<222> 34792..34811
<223> 99-1587-281.mis2 complement

<221> misc_binding
<222> 45731..45750
<223> 99-1582-430.mis1

<221> misc_binding
<222> 45752..45771
<223> 99-1582-430.mis2 complement

<221> misc_binding
<222> 49827..49846
<223> 99-1585-465.mis2

<221> misc_binding
<222> 49848..49867
<223> 99-1585-465.mis1 complement

<221> misc_binding
<222> 49835..49854
<223> 99-1585-457.mis2

<221> misc_binding
<222> 49856..49875
<223> 99-1585-457.mis1 complement

<221> misc_binding
<222> 49866..49885
<223> 99-1585-426.mis2

<221> misc_binding
<222> 49887..49906
<223> 99-1585-426.mis1 complement

<221> misc_binding
<222> 49880..49899
<223> 99-1585-412.mis2

<221> misc_binding
<222> 49901..49920
<223> 99-1585-412.mis1 complement

<221> misc_binding
<222> 49886..49905
<223> 99-1585-406.mis2

<221> misc_binding
<222> 49907..49926
<223> 99-1585-406.mis1 complement

<221> misc_binding
<222> 49901..49920
<223> 99-1585-391.mis2

<221> misc_binding
<222> 49922..49941
<223> 99-1585-391.mis1 complement

<221> misc_binding
<222> 49919..49938
<223> 99-1585-373.mis2

<221> misc_binding
<222> 49940..49959
<223> 99-1585-373.mis1 complement

<221> misc_binding
<222> 50236..50255
<223> 99-1585-55.mis2

<221> misc_binding
<222> 50257..50276
<223> 99-1585-55.mis1 complement

<221> misc_binding
<222> 54935..54954
<223> 99-1607-373.mis2

<221> misc_binding
<222> 54956..54975
<223> 99-1607-373.mis1 complement

<221> misc_binding
<222> 64219..64238
<223> 99-1577-105.mis1

<221> misc_binding
<222> 64240..64259
<223> 99-1577-105.mis2 complement

<221> misc_binding
<222> 65416..65435
<223> 99-1591-235.mis1

<221> misc_binding
<222> 65437..65456
<223> 99-1591-235.mis2 complement

<221> misc_binding
<222> 65476..65495
<223> 99-1591-295.mis1

<221> misc_binding
<222> 65497..65516
<223> 99-1591-295.mis2 complement

<221> misc_binding
<222> 66947..66966
<223> 99-1572-315.mis1

<221> misc_binding
<222> 66968..66987
<223> 99-1572-315.mis2 complement

<221> misc_binding
<222> 66967..66986
<223> 99-1572-335.mis1

<221> misc_binding
<222> 66988..67007
<223> 99-1572-335.mis2 complement

<221> misc_binding
<222> 67072..67091
<223> 99-1572-440.mis1

<221> misc_binding
<222> 67093..67112
<223> 99-1572-440.mis2 complement

<221> misc_binding
<222> 67109..67128
<223> 99-1572-477.mis1

<221> misc_binding
<222> 67130..67149
<223> 99-1572-477.mis2 complement

<221> misc_binding
<222> 67209..67228
<223> 99-1572-578.mis1

<221> misc_binding
<222> 67230..67249
<223> 99-1572-578.mis2 complement

<221> misc_binding
<222> 67413..67432
<223> 5-264-188.mis1

<221> misc_binding
<222> 67434..67453
<223> 5-264-188.mis2 complement

<221> misc_binding
<222> 67703..67722
<223> 5-169-97.mis1

<221> misc_binding
<222> 67724..67743
<223> 5-169-97.mis2 complement

<221> misc_binding
<222> 67814..67833

<223> 5-169-208.mis1

<221> misc_binding
<222> 67835..67854
<223> 5-169-208.mis2 complement

<221> misc_binding
<222> 67935..67954
<223> 5-169-331.mis1

<221> misc_binding
<222> 67956..67975
<223> 5-169-331.mis2 complement

<221> misc_binding
<222> 68193..68212
<223> 5-170-238.mis1

<221> misc_binding
<222> 68214..68233
<223> 5-170-238.mis2 complement

<221> misc_binding
<222> 68243..68262
<223> 5-170-288.mis1

<221> misc_binding
<222> 68264..68283
<223> 5-170-288.mis2 complement

<221> misc_binding
<222> 68355..68374
<223> 5-170-400.mis1

<221> misc_binding
<222> 68376..68395
<223> 5-170-400.mis2 complement

<221> misc_binding
<222> 68457..68476
<223> 5-171-156.mis1

<221> misc_binding
<222> 68478..68497
<223> 5-171-156.mis2 complement

<221> misc_binding
<222> 68505..68524
<223> 5-171-204.mis1

<221> misc_binding
<222> 68526..68545
<223> 5-171-204.mis2 complement

<221> misc_binding

<222> 68574..68593
<223> 5-171-273.mis1

<221> misc_binding
<222> 68595..68614
<223> 5-171-273.mis2 complement

<221> misc_binding
<222> 68590..68609
<223> 5-171-289.mis1

<221> misc_binding
<222> 68611..68630
<223> 5-171-289.mis2 complement

<221> misc_binding
<222> 70546..70565
<223> 5-1-60.mis1

<221> misc_binding
<222> 70567..70586
<223> 5-1-60.mis2 complement

<221> misc_binding
<222> 70708..70727
<223> 5-1-222.mis1

<221> misc_binding
<222> 70729..70748
<223> 5-1-222.mis2 complement

<221> misc_binding
<222> 80018..80037
<223> 99-1578-99.mis1

<221> misc_binding
<222> 80039..80058
<223> 99-1578-99.mis2 complement

<221> misc_binding
<222> 80098..80117
<223> 99-1578-179.mis1

<221> misc_binding
<222> 80119..80138
<223> 99-1578-179.mis2 complement

<221> misc_binding
<222> 80150..80169
<223> 99-1578-231.mis1

<221> misc_binding
<222> 80171..80190
<223> 99-1578-231.mis2 complement

<221> misc_binding
<222> 80163..80182
<223> 99-1578-245.mis1

<221> misc_binding
<222> 80184..80203
<223> 99-1578-245.mis2 complement

<221> misc_binding
<222> 80415..80434
<223> 99-1578-496.mis1

<221> misc_binding
<222> 80436..80455
<223> 99-1578-496.mis2 complement

<221> misc_binding
<222> 82070..82089
<223> 5-2-30.mis1

<221> misc_binding
<222> 82091..82110
<223> 5-2-30.mis2 complement

<221> misc_binding
<222> 82145..82164
<223> 5-2-109.mis1

<221> misc_binding
<222> 82166..82185
<223> 5-2-109.mis2 complement

<221> misc_binding
<222> 82149..82168
<223> 5-2-113.mis1

<221> misc_binding
<222> 82170..82189
<223> 5-2-113.mis2 complement

<221> misc_binding
<222> 82198..82217
<223> 5-2-162.mis1

<221> misc_binding
<222> 82219..82238
<223> 5-2-162.mis2 complement

<221> misc_binding
<222> 82214..82233
<223> 5-2-178.mis1

<221> misc_binding
<222> 82235..82254
<223> 5-2-178.mis2 complement

<221> misc_binding
<222> 82248..82267
<223> 5-2-213.mis1

<221> misc_binding
<222> 82269..82288
<223> 5-2-213.mis2 complement

<221> misc_binding
<222> 82373..82392
<223> 99-1605-112.mis2

<221> misc_binding
<222> 82394..82413
<223> 99-1605-112.mis1 complement

<221> misc_binding
<222> 83567..83586
<223> 5-3-27.mis1

<221> misc_binding
<222> 83588..83607
<223> 5-3-27.mis2 complement

<221> misc_binding
<222> 83623..83642
<223> 5-3-83.mis1

<221> misc_binding
<222> 83644..83663
<223> 5-3-83.mis2 complement

<221> misc_binding
<222> 83624..83643
<223> 5-3-84.mis1

<221> misc_binding
<222> 83645..83664
<223> 5-3-84.mis2 complement

<221> misc_binding
<222> 83788..83807
<223> 5-3-248.mis1

<221> misc_binding
<222> 83809..83828
<223> 5-3-248.mis2 complement

<221> misc_binding
<222> 83861..83880
<223> 5-3-321.mis1

<221> misc_binding
<222> 83882..83901

<223> 5-3-321.mis2 complement

<221> misc_binding

<222> 83864..83883

<223> 5-3-324.mis1

<221> misc_binding

<222> 83885..83904

<223> 5-3-324.mis2 complement

<221> misc_binding

<222> 83889..83908

<223> 5-4-313.mis1

<221> misc_binding

<222> 83910..83929

<223> 5-4-313.mis2 complement

<221> misc_binding

<222> 83917..83936

<223> 5-3-377.mis1

<221> misc_binding

<222> 83938..83957

<223> 5-3-377.mis2 complement

<221> misc_binding

<222> 83927..83946

<223> 5-4-351.mis1

<221> misc_binding

<222> 83948..83967

<223> 5-4-351.mis2 complement

<221> misc_binding

<222> 83962..83981

<223> 5-4-386.mis1

<221> misc_binding

<222> 83983..84002

<223> 5-4-386.mis2 complement

<221> misc_binding

<222> 83968..83987

<223> 5-4-392.mis1

<221> misc_binding

<222> 83989..84008

<223> 5-4-392.mis2 complement

<221> misc_binding

<222> 84027..84046

<223> 5-260-255.mis1

<221> misc_binding

<222> 84048..84067
<223> 5-260-255.mis2 complement

<221> misc_binding
<222> 84072..84091
<223> 5-260-300.mis1

<221> misc_binding
<222> 84093..84112
<223> 5-260-300.mis2 complement

<221> misc_binding
<222> 84125..84144
<223> 5-260-353.mis1

<221> misc_binding
<222> 84146..84165
<223> 5-260-353.mis2 complement

<221> misc_binding
<222> 85182..85201
<223> 5-9-50.mis1

<221> misc_binding
<222> 85203..85222
<223> 5-9-50.mis2 complement

<221> misc_binding
<222> 86239..86258
<223> 5-5-21.mis1

<221> misc_binding
<222> 86260..86279
<223> 5-5-21.mis2 complement

<221> misc_binding
<222> 86303..86322
<223> 5-5-85.mis1

<221> misc_binding
<222> 86324..86343
<223> 5-5-85.mis2 complement

<221> misc_binding
<222> 87693..87712
<223> 5-202-95.mis1

<221> misc_binding
<222> 87714..87733
<223> 5-202-95.mis2 complement

<221> misc_binding
<222> 87715..87734
<223> 5-202-117.mis1

<221> misc_binding
<222> 87736..87755
<223> 5-202-117.mis2 complement

<221> misc_binding
<222> 87767..87786
<223> 5-202-169.mis1

<221> misc_binding
<222> 87788..87807
<223> 5-202-169.mis2 complement

<221> misc_binding
<222> 87786..87805
<223> 5-202-188.mis1

<221> misc_binding
<222> 87807..87826
<223> 5-202-188.mis2 complement

<221> misc_binding
<222> 87840..87859
<223> 5-202-242.mis1

<221> misc_binding
<222> 87861..87880
<223> 5-202-242.mis2 complement

<221> misc_binding
<222> 87882..87901
<223> 5-202-284.mis1

<221> misc_binding
<222> 87903..87922
<223> 5-202-284.mis2 complement

<221> misc_binding
<222> 87960..87979
<223> 5-202-362.mis1

<221> misc_binding
<222> 87981..88000
<223> 5-202-362.mis2 complement

<221> misc_binding
<222> 87992..88011
<223> 5-202-394.mis1

<221> misc_binding
<222> 88013..88032
<223> 5-202-394.mis2 complement

<221> misc_binding
<222> 88195..88214
<223> 5-7-113.mis1

<221> misc_binding
<222> 88216..88235
<223> 5-7-113.mis2 complement

<221> misc_binding
<222> 88263..88282
<223> 5-7-181.mis1

<221> misc_binding
<222> 88284..88303
<223> 5-7-181.mis2 complement

<221> misc_binding
<222> 88277..88296
<223> 5-7-195.mis1

<221> misc_binding
<222> 88298..88317
<223> 5-7-195.mis2 complement

<221> misc_binding
<222> 88422..88441
<223> 5-7-340.mis1

<221> misc_binding
<222> 88443..88462
<223> 5-7-340.mis2 complement

<221> misc_binding
<222> 88451..88470
<223> 5-7-369.mis1

<221> misc_binding
<222> 88472..88491
<223> 5-7-369.mis2 complement

<221> misc_binding
<222> 88460..88479
<223> 5-7-378.mis1

<221> misc_binding
<222> 88481..88500
<223> 5-7-378.mis2 complement

<221> misc_binding
<222> 89374..89393
<223> 5-181-57.mis1

<221> misc_binding
<222> 89395..89414
<223> 5-181-57.mis2 complement

<221> misc_binding
<222> 89444..89463

<223> 5-181-127.mis1

<221> misc_binding
<222> 89465..89484
<223> 5-181-127.mis2 complement

<221> misc_binding
<222> 89451..89470
<223> 5-181-134.mis1

<221> misc_binding
<222> 89472..89491
<223> 5-181-134.mis2 complement

<221> misc_binding
<222> 89638..89657
<223> 5-181-321.mis1

<221> misc_binding
<222> 89659..89678
<223> 5-181-321.mis2 complement

<221> misc_binding
<222> 92740..92759
<223> 5-10-39.mis1

<221> misc_binding
<222> 92761..92780
<223> 5-10-39.mis2 complement

<221> misc_binding
<222> 93003..93022
<223> 5-10-302.mis1

<221> misc_binding
<222> 93024..93043
<223> 5-10-302.mis2 complement

<221> misc_binding
<222> 93035..93054
<223> 5-10-334.mis1

<221> misc_binding
<222> 93056..93075
<223> 5-10-334.mis2 complement

<221> misc_binding
<222> 93227..93246
<223> 5-11-158.mis1

<221> misc_binding
<222> 93248..93267
<223> 5-11-158.mis2 complement

<221> misc_binding

<222> 93299..93318
<223> 5-11-230.mis1

<221> misc_binding
<222> 93320..93339
<223> 5-11-230.mis2 complement

<221> misc_binding
<222> 93303..93322
<223> 5-11-234.mis1

<221> misc_binding
<222> 93324..93343
<223> 5-11-234.mis2 complement

<221> misc_binding
<222> 93368..93387
<223> 5-11-299.mis1

<221> misc_binding
<222> 93389..93408
<223> 5-11-299.mis2 complement

<221> misc_binding
<222> 93373..93392
<223> 5-11-304.mis1

<221> misc_binding
<222> 93394..93413
<223> 5-11-304.mis2 complement

<221> misc_binding
<222> 93398..93417
<223> 5-11-329.mis1

<221> misc_binding
<222> 93419..93438
<223> 5-11-329.mis2 complement

<221> misc_binding
<222> 93495..93514
<223> 5-12-56.mis1

<221> misc_binding
<222> 93516..93535
<223> 5-12-56.mis2 complement

<221> misc_binding
<222> 93706..93725
<223> 5-12-267.mis1

<221> misc_binding
<222> 93727..93746
<223> 5-12-267.mis2 complement

<221> misc_binding
<222> 93883..93902
<223> 5-13-145.mis1

<221> misc_binding
<222> 93904..93923
<223> 5-13-145.mis2 complement

<221> misc_binding
<222> 94150..94169
<223> 5-14-44.mis1

<221> misc_binding
<222> 94171..94190
<223> 5-14-44.mis2 complement

<221> misc_binding
<222> 94198..94217
<223> 5-14-93.mis1

<221> misc_binding
<222> 94219..94238
<223> 5-14-93.mis2 complement

<221> misc_binding
<222> 94249..94268
<223> 5-14-144.mis1

<221> misc_binding
<222> 94270..94289
<223> 5-14-144.mis2 complement

<221> misc_binding
<222> 94270..94289
<223> 5-14-165.mis1

<221> misc_binding
<222> 94291..94310
<223> 5-14-165.mis2 complement

<221> misc_binding
<222> 94402..94421
<223> 5-14-297.mis1

<221> misc_binding
<222> 94423..94442
<223> 5-14-297.mis2 complement

<221> misc_binding
<222> 94412..94431
<223> 5-14-307.mis1

<221> misc_binding
<222> 94433..94452
<223> 5-14-307.mis2 complement

<221> misc_binding
<222> 94700..94719
<223> 5-15-219.mis1

<221> misc_binding
<222> 94721..94740
<223> 5-15-219.mis2 complement

<221> misc_binding
<222> 94969..94988
<223> 5-16-157.mis1

<221> misc_binding
<222> 94990..95009
<223> 5-16-157.mis2 complement

<221> misc_binding
<222> 95241..95260
<223> 5-17-140.mis1

<221> misc_binding
<222> 95262..95281
<223> 5-17-140.mis2 complement

<221> misc_binding
<222> 95320..95339
<223> 5-18-51.mis1

<221> misc_binding
<222> 95341..95360
<223> 5-18-51.mis2 complement

<221> misc_birding
<222> 95477..95496
<223> 5-18-208.mis1

<221> misc_binding
<222> 95498..95517
<223> 5-18-208.mis2 complement

<221> misc_binding
<222> 95750..95769
<223> 5-300-238.mis1

<221> misc_binding
<222> 95771..95790
<223> 5-300-238.mis2 complement

<221> misc_binding
<222> 95799..95818
<223> 5-300-287.mis1

<221> misc_binding
<222> 95820..95839

<223> 5-300-287.mis2 complement

<221> misc_binding

<222> 96125..96144

<223> 5-262-49.mis1

<221> misc_binding

<222> 96146..96165

<223> 5-262-49.mis2 complement

<221> misc_binding

<222> 96161..96180

<223> 5-262-85.mis1

<221> misc_binding

<222> 96182..96201

<223> 5-262-85.mis2 complement

<221> misc_binding

<222> 96330..96349

<223> 5-262-254.mis1

<221> misc_binding

<222> 96351..96370

<223> 5-262-254.mis2 complement

<221> misc_binding

<222> 96931..96950

<223> 5-263-404.mis1

<221> misc_binding

<222> 96952..96971

<223> 5-263-404.mis2 complement

<221> misc_binding

<222> 97124..97143

<223> 5-265-244.mis1

<221> misc_binding

<222> 97145..97164

<223> 5-265-244.mis2 complement

<221> misc_binding

<222> 97256..97275

<223> 5-265-376.mis1

<221> misc_binding

<222> 97277..97296

<223> 5-265-376.mis2 complement

<221> misc_binding

<222> 102247..102266

<223> 99-7183-338.mis2

<221> misc_binding

<222> 102268..102287
<223> 99-7183-338.mis1 complement

<221> misc_binding
<222> 105917..105936
<223> 99-7207-138.mis2

<221> misc_binding
<222> 105938..105957
<223> 99-7207-138.mis1 complement

<221> misc_binding
<222> 255..301
<223> 99-1601-278.probe

<221> misc_binding
<222> 379..425
<223> 99-1601-402.probe

<221> misc_binding
<222> 449..495
<223> 99-1601-472.probe

<221> misc_binding
<222> 2932..2978
<223> 99-13801-100.probe

<221> misc_binding
<222> 12144..12190
<223> 99-13806-166.probe

<221> misc_binding
<222> 12513..12559
<223> 99-13799-376.probe

<221> misc_binding
<222> 17570..17616
<223> 99-13798-297.probe

<221> misc_binding
<222> 17583..17629
<223> 99-13798-284.probe

<221> misc_binding
<222> 22056..22102
<223> 99-1602-200.probe

<221> misc_binding
<222> 28941..28987
<223> 99-13794-186.probe

<221> misc_binding
<222> 28980..29026
<223> 99-13794-147.probe

<221> misc_binding
<222> 31054..31100
<223> 99-13812-384.probe

<221> misc_binding
<222> 31743..31789
<223> 99-13805-313.probe

<221> misc_binding
<222> 34768..34814
<223> 99-1587-281.probe

<221> misc_binding
<222> 45728..45774
<223> 99-1582-430.probe

<221> misc_binding
<222> 49824..49870
<223> 99-1585-465.probe

<221> misc_binding
<222> 49832..49878
<223> 99-1585-457.probe

<221> misc_binding
<222> 49863..49909
<223> 99-1585-426.probe

<221> misc_binding
<222> 49877..49923
<223> 99-1585-412.probe

<221> misc_binding
<222> 49883..49929
<223> 99-1585-406.probe

<221> misc_binding
<222> 49898..49944
<223> 99-1585-391.probe

<221> misc_binding
<222> 49916..49962
<223> 99-1585-373.probe

<221> misc_binding
<222> 50233..50279
<223> 99-1585-55.probe

<221> misc_binding
<222> 54932..54978
<223> 99-1607-373.probe

<221> misc_binding
<222> 64216..64262
<223> 99-1577-105.probe

<221> misc_binding
<222> 65413..65459
<223> 99-1591-235.probe

<221> misc_binding
<222> 65473..65519
<223> 99-1591-295.probe

<221> misc_binding
<222> 66944..66990
<223> 99-1572-315.probe

<221> misc_binding
<222> 66964..67010
<223> 99-1572-335.probe

<221> misc_binding
<222> 67069..67115
<223> 99-1572-440.probe

<221> misc_binding
<222> 67106..67152
<223> 99-1572-477.probe

<221> misc_binding
<222> 67206..67252
<223> 99-1572-578.probe

<221> misc_binding
<222> 67410..67456
<223> 5-264-188.probe

<221> misc_binding
<222> 67700..67746
<223> 5-169-97.probe

<221> misc_binding
<222> 67811..67857
<223> 5-169-208.probe

<221> misc_binding
<222> 67932..67978
<223> 5-169-331.probe

<221> misc_binding
<222> 68190..68236
<223> 5-170-238.probe

<221> misc_binding
<222> 68240..68286
<223> 5-170-288.probe

<221> misc_binding
<222> 68352..68398

<223> 5-170-400.probe

<221> misc_binding

<222> 68454..68500

<223> 5-171-156.probe

<221> misc_binding

<222> 68502..68548

<223> 5-171-204.probe

<221> misc_binding

<222> 68571..68617

<223> 5-171-273.probe

<221> misc_binding

<222> 68587..68633

<223> 5-171-289.probe

<221> misc_binding

<222> 70543..70589

<223> 5-1-60.probe

<221> misc_binding

<222> 70705..70751

<223> 5-1-222.probe

<221> misc_binding

<222> 80015..80061

<223> 99-1578-99.probe

<221> misc_binding

<222> 80095..80141

<223> 99-1578-179.probe

<221> misc_binding

<222> 80147..80193

<223> 99-1578-231.probe

<221> misc_binding

<222> 80160..80206

<223> 99-1578-245.probe

<221> misc_binding

<222> 80412..80458

<223> 99-1578-496.probe

<221> misc_binding

<222> 82067..82113

<223> 5-2-30.probe

<221> misc_binding

<222> 82142..82188

<223> 5-2-109.probe

<221> misc_binding

<222> 82146..82192
<223> 5-2-113.probe

<221> misc_binding
<222> 82195..82241
<223> 5-2-162.probe

<221> misc_binding
<222> 82211..82257
<223> 5-2-178.probe

<221> misc_binding
<222> 82245..82291
<223> 5-2-213.probe

<221> misc_binding
<222> 82370..82416
<223> 99-1605-112.probe

<221> misc_binding
<222> 83564..83610
<223> 5-3-27.probe

<221> misc_binding
<222> 83620..83666
<223> 5-3-83.probe

<221> misc_binding
<222> 83621..83667
<223> 5-3-84.probe

<221> misc_binding
<222> 83785..83831
<223> 5-3-248.probe

<221> misc_binding
<222> 83858..83904
<223> 5-3-321.probe

<221> misc_binding
<222> 83861..83907
<223> 5-3-324.probe

<221> misc_binding
<222> 83886..83932
<223> 5-4-313.probe

<221> misc_binding
<222> 83914..83960
<223> 5-3-377.probe

<221> misc_binding
<222> 83924..83970
<223> 5-4-351.probe

<221> misc_binding
<222> 83959..84005
<223> 5-4-386.probe

<221> misc_binding
<222> 83965..84011
<223> 5-4-392.probe

<221> misc_binding
<222> 84024..84070
<223> 5-260-255.probe

<221> misc_binding
<222> 84069..84115
<223> 5-260-300.probe

<221> misc_binding
<222> 84122..84168
<223> 5-260-353.probe

<221> misc_binding
<222> 85179..85225
<223> 5-9-50.probe

<221> misc_binding
<222> 86236..86282
<223> 5-5-21.probe

<221> misc_binding
<222> 86300..86346
<223> 5-5-85.probe

<221> misc_binding
<222> 87690..87736
<223> 5-202-95.probe

<221> misc_binding
<222> 87712..87758
<223> 5-202-117.probe

<221> misc_binding
<222> 87764..87810
<223> 5-202-169.probe

<221> misc_binding
<222> 87783..87829
<223> 5-202-188.probe

<221> misc_binding
<222> 87837..87883
<223> 5-202-242.probe

<221> misc_binding
<222> 87879..87925
<223> 5-202-284.probe

<221> misc_binding
<222> 87957..88003
<223> 5-202-362.probe

<221> misc_binding
<222> 87989..88035
<223> 5-202-394.probe

<221> misc_binding
<222> 88192..88238
<223> 5-7-113.probe

<221> misc_binding
<222> 88260..88306
<223> 5-7-181.probe

<221> misc_binding
<222> 88274..88320
<223> 5-7-195.probe

<221> misc_binding
<222> 88419..88465
<223> 5-7-340.probe

<221> misc_binding
<222> 88448..88494
<223> 5-7-369.probe

<221> misc_binding
<222> 88457..88503
<223> 5-7-378.probe

<221> misc_binding
<222> 89371..89417
<223> 5-181-57.probe

<221> misc_binding
<222> 89441..89487
<223> 5-181-127.probe

<221> misc_binding
<222> 89448..89494
<223> 5-181-134.probe

<221> misc_binding
<222> 89635..89681
<223> 5-181-321.probe

<221> misc_binding
<222> 92737..92783
<223> 5-10-39.probe

<221> misc_binding
<222> 93000..93046

<223> 5-10-302.probe

<221> misc_binding

<222> 93032..93078

<223> 5-10-334.probe

<221> misc_binding

<222> 93224..93270

<223> 5-11-158.probe

<221> misc_binding

<222> 93296..93342

<223> 5-11-230.probe

<221> misc_binding

<222> 93300..93346

<223> 5-11-234.probe

<221> misc_binding

<222> 93365..93411

<223> 5-11-299.probe

<221> misc_binding

<222> 93370..93416

<223> 5-11-304.probe

<221> misc_binding

<222> 93395..93441

<223> 5-11-329.probe

<221> misc_binding

<222> 93492..93538

<223> 5-12-56.probe

<221> misc_binding

<222> 93703..93749

<223> 5-12-267.probe

<221> misc_binding

<222> 93880..93926

<223> 5-13-145.probe

<221> misc_binding

<222> 94147..94193

<223> 5-14-44.probe

<221> misc_binding

<222> 94195..94241

<223> 5-14-93.probe

<221> misc_binding

<222> 94246..94292

<223> 5-14-144.probe

<221> misc_binding

<222> 94267..94313
<223> 5-14-165.probe

<221> misc_binding
<222> 94399..94445
<223> 5-14-297.probe

<221> misc_binding
<222> 94409..94455
<223> 5-14-307.probe

<221> misc_binding
<222> 94697..94743
<223> 5-15-219.probe

<221> misc_binding
<222> 94966..95012
<223> 5-16-157.probe

<221> misc_binding
<222> 95238..95284
<223> 5-17-140.probe

<221> misc_binding
<222> 95317..95363
<223> 5-18-51.probe

<221> misc_binding
<222> 95474..95520
<223> 5-18-208.probe

<221> misc_binding
<222> 95747..95793
<223> 5-300-238.probe

<221> misc_binding
<222> 95796..95842
<223> 5-300-287.probe

<221> misc_binding
<222> 96122..96168
<223> 5-262-49.probe

<221> misc_binding
<222> 96158..96204
<223> 5-262-85.probe

<221> misc_binding
<222> 96327..96373
<223> 5-262-254.probe

<221> misc_binding
<222> 96928..96974
<223> 5-263-404.probe

<221> misc_binding
<222> 97121..97167
<223> 5-265-244.probe

<221> misc_binding
<222> 97253..97299
<223> 5-265-376.probe

<221> misc_binding
<222> 102244..102290
<223> 99-7183-338.probe

<221> misc_binding
<222> 105914..105960
<223> 99-7207-138.probe

<221> misc_binding
<222> 1..18
<223> 99-1601.pu

<221> misc_binding
<222> 486..506
<223> 99-1601.rp complement

<221> misc_binding
<222> 2607..2627
<223> 99-13801.rp

<221> misc_binding
<222> 3035..3054
<223> 99-13801.pu complement

<221> misc_binding
<222> 11893..11902
<223> 99-13806.rp

<221> misc_binding
<222> 12313..12331
<223> 99-13806.pu complement

<221> misc_binding
<222> 12379..12399
<223> 99-13799.rp

<221> misc_binding
<222> 12889..12909
<223> 99-13799.pu complement

<221> misc_binding
<222> 17442..17462
<223> 99-13798.rp

<221> misc_binding
<222> 17868..17887
<223> 99-13798.pu complement

<221> misc_binding
<222> 21881..21899
<223> 99-1602.pu

<221> misc_binding
<222> 22487..22506
<223> 99-1602.rp complement

<221> misc_binding
<222> 28669..28689
<223> 99-13794.rp

<221> misc_binding
<222> 29131..29149
<223> 99-13794.pu complement

<221> misc_binding
<222> 30941..30961
<223> 99-13812.rp

<221> misc_binding
<222> 31437..31457
<223> 99-13812.pu complement

<221> misc_binding
<222> 31560..31579
<223> 99-13805.rp

<221> misc_binding
<222> 32057..32075
<223> 99-13805.pu complement

<221> misc_binding
<222> 34515..34535
<223> 99-1587.pu

<221> misc_binding
<222> 34890..34909
<223> 99-1587.rp complement

<221> misc_binding
<222> 45325..45343
<223> 99-1582.pu

<221> misc_binding
<222> 46000..46018
<223> 99-1582.rp complement

<221> misc_binding
<222> 49765..49784
<223> 99-1585.rp

<221> misc_binding
<222> 50291..50310

<223> 99-1585.pu complement

<221> misc_binding

<222> 54726..54746

<223> 99-1607.rp

<221> misc_binding

<222> 55307..55325

<223> 99-1607.pu complement

<221> misc_binding

<222> 64135..64153

<223> 99-1577.pu

<221> misc_binding

<222> 64518..64536

<223> 99-1577.rp complement

<221> misc_binding

<222> 65202..65219

<223> 99-1591.pu

<221> misc_binding

<222> 65815..65834

<223> 99-1591.rp complement

<221> misc_binding

<222> 66653..66671

<223> 99-1572.pu

<221> misc_binding

<222> 67275..67295

<223> 99-1572.rp complement

<221> misc_binding

<222> 67627..67646

<223> 5-169.pu

<221> misc_binding

<222> 68024..68043

<223> 5-169.rp complement

<221> misc_binding

<222> 67246..67263

<223> 5-264.pu

<221> misc_binding

<222> 67678..67696

<223> 5-264.rp complement

<221> misc_binding

<222> 67977..67994

<223> 5-170.pu

<221> misc_binding

<222> 68406..68424
<223> 5-170.rp complement

<221> misc_binding
<222> 68322..68340
<223> 5-171.pu

<221> misc_binding
<222> 68725..68742
<223> 5-171.rp complement

<221> misc_binding
<222> 70507..70524
<223> 5-1.pu

<221> misc_binding
<222> 70909..70928
<223> 5-1.rp complement

<221> misc_binding
<222> 79940..79957
<223> 99-1578.pu

<221> misc_binding
<222> 80557..80575
<223> 99-1578.rp complement

<221> misc_binding
<222> 82057..82077
<223> 99-1605.rp

<221> misc_binding
<222> 82484..82504
<223> 99-1605.pu complement

<221> misc_binding
<222> 82058..82077
<223> 5-2.pu

<221> misc_binding
<222> 82473..82492
<223> 5-2.rp complement

<221> misc_binding
<222> 83561..83578
<223> 5-3.pu

<221> misc_binding
<222> 83965..83982
<223> 5-3.rp complement

<221> misc_binding
<222> 83597..83616
<223> 5-4.pu

<221> misc_binding
<222> 83999..84017
<223> 5-4.rp complement

<221> misc_binding
<222> 83793..83812
<223> 5-260.pu

<221> misc_binding
<222> 84148..84167
<223> 5-260.rp complement

<221> misc_binding
<222> 85153..85170
<223> 5-9.pu

<221> misc_binding
<222> 85559..85576
<223> 5-9.rp complement

<221> misc_binding
<222> 86239..86257
<223> 5-5.pu

<221> misc_binding
<222> 86519..86539
<223> 5-5.rp complement

<221> misc_binding
<222> 87619..87638
<223> 5-202.pu

<221> misc_binding
<222> 88033..88050
<223> 5-202.rp complement

<221> misc_binding
<222> 88104..88122
<223> 5-7.pu

<221> misc_binding
<222> 88519..88536
<223> 5-7.rp complement

<221> misc_binding
<222> 89338..89357
<223> 5-181.pu

<221> misc_binding
<222> 89739..89758
<223> 5-181.rp complement

<221> misc_binding
<222> 92722..92741
<223> 5-10.pu

<221> misc_binding
<222> 93124..93142
<223> 5-10.rp complement

<221> misc_binding
<222> 93090..93108
<223> 5-11.pu

<221> misc_binding
<222> 93490..93509
<223> 5-11.rp complement

<221> misc_binding
<222> 93460..93478
<223> 5-12.pu

<221> misc_binding
<222> 93862..93881
<223> 5-12.rp complement

<221> misc_binding
<222> 93759..93776
<223> 5-13.pu

<221> misc_binding
<222> 94175..94192
<223> 5-13.rp complement

<221> misc_binding
<222> 94127..94144
<223> 5-14.pu

<221> misc_binding
<222> 94535..94554
<223> 5-14.rp complement

<221> misc_binding
<222> 94504..94521
<223> 5-15.pu

<221> misc_binding
<222> 94904..94921
<223> 5-15.rp complement

<221> misc_binding
<222> 94833..94850
<223> 5-16.pu

<221> misc_binding
<222> 95232..95251
<223> 5-16.rp complement

<221> misc_binding
<222> 95124..95142

<223> 5-17.pu

<221> misc_binding
<222> 95542..95561
<223> 5-17.rp complement

<221> misc_binding
<222> 95290..95308
<223> 5-18.pu

<221> misc_binding
<222> 95689..95708
<223> 5-18.rp complement

<221> misc_binding
<222> 95533..95551
<223> 5-300.pu

<221> misc_binding
<222> 95934..95952
<223> 5-300.rp complement

<221> misc_binding
<222> 96097..96115
<223> 5-262.pu

<221> misc_binding
<222> 96574..96591
<223> 5-262.rp complement

<221> misc_binding
<222> 96548..96565
<223> 5-263.pu

<221> misc_binding
<222> 96982..97001
<223> 5-263.rp complement

<221> misc_binding
<222> 96901..96918
<223> 5-265.pu

<221> misc_binding
<222> 97292..97309
<223> 5-265.rp complement

<221> misc_binding
<222> 102156..102176
<223> 99-7183.rp

<221> misc_binding
<222> 102584..102604
<223> 99-7183.pu complement

<221> misc_binding

<222> 105570..105588
<223> 99-7207.rp

<221> misc_binding
<222> 106056..106074
<223> 99-7207.pu complement

<221> misc_feature
<222> 86434
<223> diverging nucleotide G in reference genbank : L78132

<221> misc_feature
<222> 86435
<223> diverging nucleotide T in reference genbank : L78132

<221> misc_feature
<222> 88355
<223> diverging nucleotide C in reference genbank : L78132

<221> misc_feature
<222> 92976
<223> insertion of G in reference genbank : L78132

<221> misc_feature
<222> 93240
<223> diverging nucleotide T in reference genbank : L78132

<221> misc_feature
<222> 93471
<223> diverging nucleotide G in reference genbank : L78132

<221> misc_feature
<222> 93592
<223> diverging nucleotide C in reference genbank : L78132

<221> misc_feature
<222> 93680
<223> diverging nucleotide C in reference genbank : L78132

<221> misc_feature
<222> 93681
<223> diverging nucleotide C in reference genbank : L78132

<221> misc_feature
<222> 93682
<223> diverging nucleotide C in reference genbank : L78132

<221> misc_feature
<222> 93683
<223> diverging nucleotide G in reference genbank : L78132

<221> misc_feature
<222> 93712
<223> deletion of A in reference genbank : L78132

<221> misc_feature
<222> 93728
<223> diverging nucleotide C in reference genbank : L78132

<221> misc_feature
<222> 93747
<223> diverging nucleotide T in reference genbank : L78132

<221> misc_feature
<222> 93761
<223> diverging nucleotide C in reference genbank : L78132

<221> misc_feature
<222> 94151
<223> deletion of TTA in reference genbank : L78132

<221> misc_feature
<222> 94154
<223> diverging nucleotide C in reference genbank : L78132

<221> misc_feature
<222> 94241
<223> insertion of G in reference genbank : L78132

<221> misc_feature
<222> 94430
<223> diverging nucleotide C in reference genbank : L78132

<221> misc_feature
<222> 94771
<223> insertion of A in reference genbank : L78132

<221> misc_feature
<222> 94805
<223> insertion of T in reference genbank : L78132

<221> misc_feature
<222> 95121
<223> deletion of AG in reference genbank : L78132

<221> misc_feature
<222> 95126
<223> diverging nucleotide A in reference genbank : L78132

<221> misc_feature
<222> 95130
<223> deletion of G in reference genbank : L78132

<221> misc_feature
<222> 95134
<223> deletion of G in reference genbank : L78132

<221> misc_feature
<222> 95149
<223> deletion of A in reference genbank : L78132

<221> misc_feature
<222> 95155
<223> deletion of A in reference genbank : L78132

<221> misc_feature
<222> 95174
<223> deletion of AA in reference genbank : L78132

<221> misc_feature
<222> 95368
<223> deletion of A in reference genbank : L78132

<221> misc_feature
<222> 95411
<223> deletion of C in reference genbank : L78132

<221> misc_feature
<222> 95419
<223> deletion of C in reference genbank : L78132

<221> misc_feature
<222> 95431
<223> insertion of TG in reference genbank : L78132

<221> misc_feature
<222> 95435
<223> insertion of C in reference genbank : L78132

<221> misc_feature
<222> 95444
<223> diverging nucleotide G in reference genbank : L78132

<221> misc_feature
<222> 95445
<223> diverging nucleotide C in reference genbank : L78132

<221> misc_feature
<222> 95534
<223> insertion of A in reference genbank : L78132

<221> misc_feature
<222> 95678
<223> insertion of G in reference genbank : L78132

<221> primer_bind
<222> 67820..67850
<223> 5-169-208_A_AS complement

<221> primer_bind
<222> 67820..67848
<223> 5-169-208_A_S

<221> primer_bind
<222> 67820..67850

<223> 5-169-208_G_AS complement

<221> primer_bind

<222> 67820..67848

<223> 5-169-208_G_S

<221> primer_bind

<222> 67941..67969

<223> 5-169-331_C_AS complement

<221> primer_bind

<222> 67940..67969

<223> 5-169-331_C_S

<221> primer_bind

<222> 67941..67969

<223> 5-169-331_T_AS complement

<221> primer_bind

<222> 67940..67969

<223> 5-169-331_T_S

<221> primer_bind

<222> 67709..67738

<223> 5-169-97_C_AS complement

<221> primer_bind

<222> 67707..67737

<223> 5-169-97_C_S

<221> primer_bind

<222> 67709..67738

<223> 5-169-97_G_AS complement

<221> primer_bind

<222> 67707..67737

<223> 5-169-97_G_S

<221> primer_bind

<222> 68199..68228

<223> 5-170-238_A_AS complement

<221> primer_bind

<222> 68198..68227

<223> 5-170-238_A_S

<221> primer_bind

<222> 68199..68228

<223> 5-170-238_G_AS complement

<221> primer_bind

<222> 68198..68227

<223> 5-170-238_G_S

<221> primer_bind

<222> 68249..68277
<223> 5-170-288_A_AS complement

<221> primer_bind
<222> 68247..68277
<223> 5-170-288_A_S

<221> primer_bind
<222> 68249..68277
<223> 5-170-288_C_AS complement

<221> primer_bind
<222> 68247..68277
<223> 5-170-288_C_S

<221> primer_bind
<222> 68463..68492
<223> 5-171-156_G_AS complement

<221> primer_bind
<222> 68463..68491
<223> 5-171-156_G_S

<221> primer_bind
<222> 68463..68492
<223> 5-171-156_T_AS complement

<221> primer_bind
<222> 68463..68491
<223> 5-171-156_T_S

<221> primer_bind
<222> 68511..68539
<223> 5-171-204_C_AS complement

<221> primer_bind
<222> 68511..68539
<223> 5-171-204_C_S

<221> primer_bind
<222> 68511..68539
<223> 5-171-204_T_AS complement

<221> primer_bind
<222> 68511..68539
<223> 5-171-204_T_S

<221> primer_bind
<222> 68580..68608
<223> 5-171-273_A_AS complement

<221> primer_bind
<222> 68580..68608
<223> 5-171-273_A_S

<221> primer_bind
<222> 68580..68608
<223> 5-171-273_G_AS complement

<221> primer_bind
<222> 68580..68608
<223> 5-171-273_G_S

<221> primer_bind
<222> 68596..68626
<223> 5-171-289_C_AS complement

<221> primer_bind
<222> 68596..68624
<223> 5-171-289_C_S

<221> primer_bind
<222> 68596..68626
<223> 5-171-289_T_AS complement

<221> primer_bind
<222> 68596..68624
<223> 5-171-289_T_S

<221> primer_bind
<222> 68361..68389
<223> 5-171-54_C_AS complement

<221> primer_bind
<222> 68360..68389
<223> 5-171-54_C_S

<221> primer_bind
<222> 68361..68389
<223> 5-171-54_G_AS complement

<221> primer_bind
<222> 68360..68389
<223> 5-171-54_G_S

<221> primer_bind
<222> 66953..66983
<223> 99-1572-315_C_AS complement

<221> primer_bind
<222> 66951..66981
<223> 99-1572-315_C_S

<221> primer_bind
<222> 66953..66983
<223> 99-1572-315_T_AS complement

<221> primer_bind
<222> 66951..66981
<223> 99-1572-315_T_S

<221> primer_bind
<222> 66973..67002
<223> 99-1572-335_A_AS complement

<221> primer_bind
<222> 66973..67001
<223> 99-1572-335_A_S

<221> primer_bind
<222> 66973..67002
<223> 99-1572-335_G_AS complement

<221> primer_bind
<222> 66973..67001
<223> 99-1572-335_G_S

<221> primer_bind
<222> 67078..67106
<223> 99-1572-440_C_AS complement

<221> primer_bind
<222> 67078..67106
<223> 99-1572-440_C_S

<221> primer_bind
<222> 67078..67106
<223> 99-1572-440_T_AS complement

<221> primer_bind
<222> 67078..67106
<223> 99-1572-440_T_S

<221> primer_bind
<222> 67115..67144
<223> 99-1572-477_A_AS complement

<221> primer_bind
<222> 67113..67143
<223> 99-1572-477_A_S

<221> primer_bind
<222> 67115..67144
<223> 99-1572-477_T_AS complement

<221> primer_bind
<222> 67113..67143
<223> 99-1572-477_T_S

<221> primer_bind
<222> 67215..67247
<223> 99-1572-578_C_AS complement

<221> primer_bind
<222> 67212..67243

<223> 99-1572-578_C_S

<221> primer_bind

<222> 67215..67247

<223> 99-1572-578_T_AS complement

<221> primer_bind

<222> 67212..67243

<223> 99-1572-578_T_S

<221> misc_feature

<222> 8187,14867,14970,29204,29487,34266

<223> n=a, g, c or t

<400> 1

| | | | | | | |
|-------------|-------------|-------------|-------------|-------------|-------------|------|
| ttggcttggc | agggaacca | gctcaccaga | ctctctgcag | acccgaagtc | attacataca | 60 |
| gtatgataac | agggaatgga | cccgaccagc | atttgctgga | gatgatattct | ggtgtcagcc | 120 |
| cgacaggccc | ctacctgctt | ctcttgatat | gcaggaatcc | cttcaagctc | caacaagatc | 180 |
| tgtttaatag | actggagagt | ccttttagttc | cttccctctaa | gggaaaaatca | gatcgttctg | 240 |
| gtttgcttg | taactcctta | cttcacccct | gatgggaagt | ttatagaatg | agggaaccagg | 300 |
| gctattacat | gaaactataa | aactgcctag | agcacatact | tggtattttt | aacattgttg | 360 |
| agagggactc | acttaattca | gccttgccagc | tattgcattc | ctgtccaaac | caacggcagg | 420 |
| ttctcaaaac | aagcggtgaa | agggttcctg | ttgcagagct | gtctggacat | ttaaagaagg | 480 |
| gagaggaaat | ctcaaggggt | cggttgcact | ggaatagaaa | tcgcctgttc | tttttttttg | 540 |
| agacggagtc | tcgctctgtc | acccaggctg | gagagcagtt | gcgcgatctt | tgctcactgc | 600 |
| aacctctgcc | tcccgggttc | acgccattct | cctgcctcag | cctcctgaat | agctgggact | 660 |
| acaggcgccc | gccaccacgt | ctggctcatt | ttttgtattt | ttagtagaga | tggagtttca | 720 |
| ccatttttagc | caggatggtc | tcgatctgct | gaccttgtaa | tccaccgcgc | tcggcctccc | 780 |
| aaagtacagg | gattataggc | gtgagccacc | gcgcccagg | gcctgttctt | tttttaagag | 840 |
| tctcactctg | tcgcccaggc | tggcgtgcag | tggcgcgac | tctgcttact | gcagtctccg | 900 |
| tctcctgagt | tcaaatcaag | cgagaaatca | cttggttctt | tctgtgaacg | gaagcatcgc | 960 |
| agatctctct | tggcctcaca | ctcctccatc | tccctgattc | ctctgttctt | catttaccta | 1020 |
| ccttcccagc | agtctgcaga | gctggccgct | cactcacctc | tagtaagggg | atggagggtc | 1080 |
| ctgtgttgga | ataactcaat | gaccgctaga | aagttaaaaa | taaatgggta | atgccaggag | 1140 |
| aacttggtcg | gtgccttaaa | agccatagaa | cttctctttc | catctgtaga | taactgtaga | 1200 |
| caattttgtc | caaaacagat | aatgatctga | ttctacctcc | cattgggtatt | tcccttcctc | 1260 |
| ggcctgtgac | atctcacttt | ctctagactg | aactttatcc | cagactgtga | ccttgccatg | 1320 |
| accttccctc | tgcgtgtgcc | tctgccacca | cagggaatggc | cacgcctcag | atcatgtcac | 1380 |
| cgtggggaac | aaacctctca | cctgcgactc | tgaagtctcc | tctctgacct | tcttttcttt | 1440 |
| cttccccctc | ccccctccct | cactccctct | gcacctgtgt | tctgctgtca | cgtcccaaac | 1500 |
| tcacccctgt | agagctgggt | aagagatgct | gatgtagttc | ttgaccttga | acccagccc | 1560 |
| tgcagccgtc | ctgtggcctc | actgaccagc | cgctcatgcc | tgggtcaagca | ttttgggtgat | 1620 |
| gctcttggtg | attttcaatg | ggacctgcct | tgccaagccc | tgggcttagg | tgaaccagga | 1680 |
| ccacctgcat | tctatgtttt | tgattgctgg | aaaaaaatca | tgaatgtca | actgttggtc | 1740 |
| tcatttttcc | cactgccagt | tcctgctacc | caacctccgc | cctcatttca | aggccttgag | 1800 |
| tacttttttt | ctatagtga | gtctcccaaa | aatgatattt | ttttaaaaaa | gaaaagccat | 1860 |
| agtactctga | tttgatgtgg | tctgttaata | cctatgggct | ttgacttggt | tctgctttta | 1920 |
| gacctagaca | aaataaaata | tctgtggtta | aacatattca | agtttaccgg | gcacgggggc | 1980 |
| tcacgcctgt | aatcccagca | ctttgggagg | ctggggcagg | cagatcactt | gagcccagga | 2040 |
| gtttgagacc | agcctgggca | acagggtgaa | acaacatctc | tacaaaaata | caaaaaatac | 2100 |
| ctgggcattg | tgggtgcatgc | ctgtagtcgc | agctactcgg | gagactgagg | tgggaggatg | 2160 |
| gcttgagctc | tggaggcgga | ggtcatagt | agccaagatc | gtgccactga | actccagcct | 2220 |
| gggcaacaga | ggcagattct | ttctctctaa | aaaacataaa | ataaaaaaag | gccaggcgca | 2280 |
| gtggctcaca | cctgtaatcc | cagcactttg | ggaggctgag | ggggggcgac | gaagagggtca | 2340 |
| ggagatagag | accatcctgg | ccaacatggt | gaaaccctgc | ctctactaaa | aatacaaaaa | 2400 |

| | | | | | | |
|-------------|-------------|-------------|-------------|-------------|-------------|------|
| ttagccgggt | gtagtggtgc | atgcctgtaa | tctcaactac | tcaggaggct | gaggcaggaa | 2460 |
| aatcgcttga | acccaggagg | cggaggctgc | agtgagccaa | gatcgcacca | ctgcactcca | 2520 |
| gcctgggtga | cagagcaaga | ctctgtcccc | caccaaaaaa | aataaataaa | taaatcaggc | 2580 |
| caaagggcaa | aaatgcttgc | tttttagcac | ttagtagtta | tttccccaag | aagagcggga | 2640 |
| gagaagttaa | ttaataatga | aactggacag | ttctttatca | gctctaattg | tttgactcaa | 2700 |
| tggcttctct | tctcattacc | atgcagtgc | ctgctggctg | caatgccttt | gaacttcaca | 2760 |
| agaaggtag | aatttcactg | agacattcgg | atgggtgtggg | tgtcagggtg | cagctctcac | 2820 |
| acatagttga | gagtgtaaat | tgatacaact | ttatggaaaa | ttaattggga | gtaccatttc | 2880 |
| acactcctgt | ctagcaatct | cactttaagg | acttgatcct | acagaactca | ttacatgggtg | 2940 |
| caaggttcac | agtgtggcat | tcaaaataga | gaagagctgc | gggtaactcc | catgcccgtt | 3000 |
| ggcaggaact | ggttgaataa | attatgggtgc | atcagtgtctg | tggggtatca | ttaaaccatt | 3060 |
| aaaaagaaga | gagagtctctg | gccttaaaaa | aaacttatct | gatgtattgt | taaacagata | 3120 |
| aagcaagttg | tagatcaatg | tgatttgggg | ctaaaaaaat | atttctatat | aggtgtgaac | 3180 |
| atggccatga | ctaaggaatc | aggaaggaag | tacctagatt | gtaaccagta | acatgtcggg | 3240 |
| agtgagatgg | gattgagaga | cgtataataa | gattgagaga | aaaagatttt | cccatctctt | 3300 |
| tttgattttt | taagaaaaca | gcatgatttt | cagtaatttt | tacttttgtg | tgtttttggg | 3360 |
| attttttctt | tttctttttt | tttttttttt | ttttgagacg | gagtttccact | cttggttgccc | 3420 |
| aggctggaat | gcgatggccc | agtcccagct | cactgcaacc | ttcacttccc | aggttcaaga | 3480 |
| gattctcctg | tctcagcctc | cagagtagct | gggattacag | gccccctgcca | ttacgcccag | 3540 |
| ctactttttg | tatttttagt | agagatgggt | ttcaccgtgt | tggttaggct | ggtttgaact | 3600 |
| cctgagctca | ggcgatctgc | ctacttcagc | ctcccaaaat | gctgggatta | cagccgtgag | 3660 |
| ccaccgcccc | cagccggtat | tttttcaaat | caaagaaaaa | ataatagagt | aaatcatcca | 3720 |
| aaacttttag | tggatattag | actcagtaaa | cttttcattat | atgacagatg | aagccaaatg | 3780 |
| gtctttctgt | gcagtcagct | agcacacaat | tgtgcaccgc | aggaaaatta | gagactgaac | 3840 |
| cggggtgtct | gtggatgcat | ttcctcagca | ttcagccttc | cttttgcccg | tgttctagca | 3900 |
| ttacttctgt | cctacagcct | gggatttgtg | aatgaaatag | acagggtgcaa | aaactccctg | 3960 |
| cctgtctgta | atatccatag | ccccgtgctc | tacttgtatt | tgcattgtaca | aaccataatc | 4020 |
| tcctgtaaaa | tactctgtga | tattttctgaa | taataataaa | ctctacatcc | tacacaaagg | 4080 |
| caaaaccctt | gtatctttca | tctttgaaac | catagcaaa | gtatgaaatt | acacctgagc | 4140 |
| atgcctggcc | tcaaagtcct | ggaacgggta | tgtctttgac | cctcacttca | actcaactcc | 4200 |
| agaagaagca | ggtcttcctt | gtaattggat | agaaaactca | ttgtagagaa | gaaagatcta | 4260 |
| cagggtcaaga | aaccacacag | tttgcgtgaa | tccgagcaaa | gcactgtagc | atttatattta | 4320 |
| tattttcact | cttcttattt | agctcttttt | tttttttttt | ttttgagatg | gagtttcatt | 4380 |
| cttgtcaccc | agcctggagc | aatgggtgcca | tctcggtcca | ctgcaacctc | tgccctccag | 4440 |
| gttcaagtga | ttctcctgcc | tcagcctcct | gagtagctgg | ggttacaggc | tcccaccgcc | 4500 |
| acaccagccc | aattttttgt | attttttagta | gagacggggt | ttcaccatgt | tagccagact | 4560 |
| ggtctcaaac | tcttggcctt | aggtgatcca | ccgcctcag | catcccaaag | tgcctgggatt | 4620 |
| acaggcgcac | cggccttagc | tcttttatcc | ttaatgaaat | gctcctcatt | ccctgaggtc | 4680 |
| tcacttgaat | tcttggccac | ctctggggtg | ccttctctct | ctgtctgtgc | tttgtaacac | 4740 |
| gtggttcctt | atgattgtcaa | tatttatgca | tattgtcttca | ttccattact | ggattataat | 4800 |
| cttgaagcaa | cagatttttg | tctctatate | ccagagccta | gaatggattc | ttacactggg | 4860 |
| cagtaagtac | ttaataaatg | tatcccaaat | caaataaata | catttcttct | ttttcttttc | 4920 |
| tttttttttt | ttttttgaga | cagggttcca | ctctgtcacc | caggctggag | tgtaatgaca | 4980 |
| tgatctcagc | ttactacagc | ctcaatctcc | tgggcttaag | caatcctccc | acctcagcct | 5040 |
| cccacatagc | taggactaca | ggcgctcacc | acaacacctc | atttttgtat | attttttgta | 5100 |
| gagattgggg | gatctcacta | cgttgccccg | gctgggtttg | aacttctggg | ctcagacaat | 5160 |
| ccaccacact | tggcctccca | aactgttgag | attacaggaa | tgagccacca | ttccctggcc | 5220 |
| aaatacattt | ctaaaagcca | gtttctggag | tatactgtca | aataatagat | atatgtccac | 5280 |
| atttttatac | ggacttatat | tgtaagaaaa | agtaaaaaata | agtgtgaagt | tattacagta | 5340 |
| atagtaatta | ttttgcagaa | aaagaactga | gtttaaacag | gctttttaga | aaaacccaac | 5400 |
| aggagattca | cagtctggta | ctaactgtta | gacatggatc | atcagtaaat | gtgttccaaa | 5460 |
| gagttacaca | gataccagct | ttgtcttggg | aattcttacc | cctgaaaatt | gattgactat | 5520 |
| cactgactgt | gtgacatgag | aaagttttgt | ggggtttttt | ttttgtattt | ttttgagacg | 5580 |
| tatcttgctc | tgtcacccaa | gctggagtc | actggcgaga | tcttggtcca | ctacaacctc | 5640 |
| tgcgcctggt | ttcaagcgat | tctcctgctc | cagcctccag | aatagctgcy | attacaggca | 5700 |

| | | | | | | |
|-------------|-------------|-------------|-------------|-------------|-------------|------|
| cctgccacca | tgccccggcta | atTTTTgtat | TTTTagtaaa | gacgggggttt | catcgtgttg | 5760 |
| gccaggatgg | tcttgaactc | ctgacctcag | gtgatctgcc | cacctcagcc | tcccaaagtg | 5820 |
| ctgggattac | aggcatgagc | caccgtgccc | agcctgaaaa | agtTTTgaac | ggtctaaatc | 5880 |
| catatgctgt | gaatcctatt | accatcacac | acttaggcac | ttaaaatcat | atTTTcaagg | 5940 |
| ccaggtagctg | aaatattttc | tgcaagcaga | gagatcaaac | TTtagcattg | tTattcttgt | 6000 |
| agtagtttca | tagtttgagg | tcttagattt | aagtcttcca | tTgattttga | tttgattttt | 6060 |
| gtatatggag | ataggggtct | agtttcatte | TTTTgcatat | ggatatccag | TTTTccagc | 6120 |
| accattttatt | gaagagactg | tctttttcac | cagtgtatgc | tcttggcacc | tTcgtcaaaa | 6180 |
| atgagttccc | tgtaggtgtg | tgggtttgct | tctggttctc | tattctgtcc | cattgggtcta | 6240 |
| agtgttttgt | tttatgctac | taccatgctg | gttggtagatg | ctctgcagta | taacttgaaa | 6300 |
| gcaggtaatg | tgattccaaa | gaagctagtt | aagtaattga | gctaaactgg | aacctcaggt | 6360 |
| gtagaagtca | taagcgtggg | gagcgtttct | tctcaggttc | tctgcctata | atTTtagtttg | 6420 |
| ccacaccaga | tgaacagtga | caacttggtc | ttgggtgttcg | tgggtggtttc | caaccaaact | 6480 |
| ttgggtcataa | cagggtgaacc | agcctggggc | atgctttccc | attcggttat | cctccccata | 6540 |
| gtttgcaaag | tagcaaagat | gaactcttca | tgagttggct | aagcatagac | atTTcaagac | 6600 |
| caaactaaac | gtcctgaaga | gcatgtttca | cagaaaacta | gcccctaagg | gaccagtggg | 6660 |
| ggctgtcaga | gaacaaggtt | tcaacgtact | gagttttaaa | gatctaattg | gcttttaata | 6720 |
| acaattcatg | aaccaggcac | catagtctac | aaaatagaca | gggtttctgc | tgggcactgc | 6780 |
| aggacagttg | gtttttggaa | ggtggcttga | gcaggaacaa | ggaaaaagca | ccgtgccaa | 6840 |
| agtggattgg | ttaacatcag | gggacttcgg | gtgactttcc | ttctatgggt | taaagcaaa | 6900 |
| gggacttccc | tagcatgtca | gctcaggttg | actgggcccc | tttgatttgg | ttgctgtgaa | 6960 |
| tctcctagtt | ttttttgttt | tgggtttggtt | tgggtctttt | ggggaaaacg | ggccagtttg | 7020 |
| gagattcagc | tattatttct | ctctcctgat | atcagaagat | cagatcttat | gagtacacag | 7080 |
| ctgagggtttt | gggttggtga | tgtggaaccc | tgggtgtgag | gactccattt | tgggttggtc | 7140 |
| tattggggtc | tcggtgcagg | agctcagtc | aaatcagttg | cctctcctca | tttttatttg | 7200 |
| acttctccat | caatctatcc | gtgtctcccg | tcacatcagt | ccattccccc | gtgggctgca | 7260 |
| cattcagctc | ggagctgaga | gctttttccc | gggtgtgccc | tggggtttct | gctgcttgca | 7320 |
| gctgatatt | aaatctcagg | tgtaaatctt | cagaggcaac | tgttcccttag | taccagagc | 7380 |
| tttcagctcc | ctgagcagaa | atgggacttg | actgtcagtt | tataaaactaa | ccaaggtgtg | 7440 |
| aaattcatgc | aacttagccg | actttctgtt | caaagaattc | ttggcagcag | ttaatacatt | 7500 |
| ttgccccaat | ataagataat | tcccttgtac | tcacaatgag | aaagttttac | aaaatggggg | 7560 |
| ttttcttttag | tttacttgaa | tataaaacat | aggtgttcca | ctctgcagta | ccttaacagt | 7620 |
| tcttaaggag | atgtttgaaa | caacctatgt | ccaggcctca | cacctcgcca | attaataaaa | 7680 |
| tgagaagttc | ttcccagcca | gtgttaagaa | aaattaacat | caagttttag | gaaggtagac | 7740 |
| agattatgca | aatgcatacc | tatatgattt | aagttattac | attaattttac | acacacatat | 7800 |
| ttaaaatcat | agattaatct | aatttagaga | tgtgtcattt | tttccatctc | tctgttttca | 7860 |
| taaatgttat | tcacacggca | tttctctgct | atcctcggaa | tagtgtttgt | atcgtgtcac | 7920 |
| tctggcacgg | ggctctacag | aacatgtcga | gcgtgttgcc | ttccctactg | cccacatcgt | 7980 |
| ttgagagaac | acatttttaa | cattttttta | ttgtggtaaa | atacacataa | cataaaagtt | 8040 |
| acgattttaa | ccttttttaa | ctctgtcacc | caggctggag | tgcagtggcg | agatcttggt | 8100 |
| tcactgcaac | ctccgcctcc | taggtccaag | tgattctcct | gcctcagcct | tccgagtagc | 8160 |
| tgggattaca | ggtgcacacc | accacgnccg | gctaattttg | tatttttagt | agatgcgggg | 8220 |
| tttcaccatg | ttagccaggt | tgggtctgaa | ctcccgacct | cagggtgatca | gcccgcctcg | 8280 |
| cctccccagt | gctgggatta | caggcgtgcg | ccactgtgcc | ggggccattt | taaccacttt | 8340 |
| taagtgcaca | gttcagtggc | attaagtata | ttcgcggtgt | tgtgcgaccg | tcaccaccat | 8400 |
| tcacctccag | aacttctctg | tcttcccaaa | ctgaaattct | gtaccatttg | aacggtaact | 8460 |
| ccccattccc | catttctgct | tcttaggcc | tgacatggag | gctgggcca | cggatatctc | 8520 |
| acctcccttc | aggcttctcc | agatttgccc | ccgtttttct | ccctctttgt | cccatctcca | 8580 |
| aagaaatggt | gtcttttcat | catcaaggtc | catcccttgc | tccttgaata | cactccaggc | 8640 |
| ccagtggaac | aggcatcctg | tgggggtgcac | ggacagggtg | cctgggggaa | accaggggca | 8700 |
| cagaaccag | accgggggtt | tggagaaggt | gtcctagcag | aagtgatgtc | taagctgagg | 8760 |
| ccctacagat | aagagaaagt | aagcagatga | aagggtggg | gagggtggca | tttcaggcct | 8820 |
| acacaaccac | acgcgtgttc | ttcagccatc | tccatggcct | cactgcccac | ctggtatcag | 8880 |
| ccggccacca | ccgggctaga | acggctttca | aaatcgtctg | tctgtacttc | ctcaccaaat | 8940 |
| cttgtcttca | cttgggtgctc | aagcccatca | cctttctgca | agtattattt | tttttttttt | 9000 |

| | | | | | | |
|-------------|-------------|-------------|-------------|-------------|-------------|-------|
| ggagatggag | tctcgctctg | tcacccgggc | tggagtgcag | tggttcaatg | atagctcaact | 9060 |
| gcaaccttga | actcctgggc | tcaagatcct | cttgccacag | cctcccaaag | tgctgagatt | 9120 |
| acaggcacia | gccaccatgc | gtggctcctg | ctgcaacttt | tttttttttt | tttttttttt | 9180 |
| ttttgagaca | gaatctcgct | ctgtcgctca | ggctggagtg | cagtgggtgtg | atctcggctc | 9240 |
| aatgcaacct | ccgcctcccg | ggttcagggtg | attctcctgc | ctcaccctcc | tgagtagcta | 9300 |
| ggaacacagg | cgctcaccac | cacatccagc | taatttttgt | gttttttagta | gagccggggt | 9360 |
| tttgccatgt | tggccaggct | tctctcaaac | tcctggacct | cgggcgattg | gcccgcctcg | 9420 |
| gcctcccaa | atgctggaat | tacaggcatg | agccaccgtg | cctggccatt | tgctgcaact | 9480 |
| tttgacactg | ctccccctgc | ttttcttccc | ctctctgacc | tcctttctct | gctgtccttt | 9540 |
| cgttccttcc | tctgccaactg | aagtgtcctt | ctcaggctct | tctcaagggt | gtgaccttac | 9600 |
| agctgtctct | tcacttccag | tcattttcttt | cataatcaact | ttgacatcct | tatttttcac | 9660 |
| tcctgccctg | gcctctccca | gggaccagga | ccatgcattc | agctcctggg | ggcatctcaa | 9720 |
| gcttggtgtg | tgtgagcctg | cccttggtgt | cttctccgtc | acctcttcac | agcttgctct | 9780 |
| gcatttcacc | tcctttcctg | ttttccccag | tgatcgcac | tctacagcgg | ctctcacttc | 9840 |
| atcccccttct | ctcctagagg | agtgatgcgg | agtctcatta | atccttgctt | atgtcattct | 9900 |
| tcccccttct | ctgtccatca | cctccacatg | tcctgttccc | ccatgcgtcc | tacactgtag | 9960 |
| ccagggtgggt | atttcctgtg | ctggtcttag | acacccccctg | aggataccct | gcttcaggcg | 10020 |
| agagccctca | gtgactccct | gttgctccga | atgacgtcca | gctccttgga | cagtccccag | 10080 |
| tgtattcacc | tgtctcatct | ccttcttttt | gttttggttg | tttttcttaa | cttccagccc | 10140 |
| gatttctgaa | tcattctcct | cttgccccct | ccattgcctt | tgcttaagac | taaatgctcc | 10200 |
| ttcctcccaa | gtccccactg | cccagatttc | agcagggtcc | atctcaaaca | tgtctgtctc | 10260 |
| caagaaactg | cctctgattt | ttttcataag | aagacacctg | tcctctctga | cttcatctgt | 10320 |
| accctctct | tggaagtac | tatcttgtgc | cttgcatctt | cgttggttaa | gtggtctcca | 10380 |
| tttcccagca | tatcttgagg | tcaagggttc | aggtcatctt | atctttgtct | atgcattgca | 10440 |
| atatgggggt | ttttacatat | tagctgctca | ataaatcggt | gttgaataaa | ggcatgtgta | 10500 |
| tgctttcatt | aagactatga | aaccacaaaa | aatcagtggt | tttcctatct | cacccttaga | 10560 |
| aaacaaaccc | acaacatagc | acaacctgat | atcagagct | aagaacaaaag | gtcatgcata | 10620 |
| ttaatctaaa | ttctatcttt | atcaactttc | acaagtaatt | cgtattttccc | tgtctgcac | 10680 |
| acggggatga | ttctggccag | acattgacct | tggtaaaatt | tcctccagat | tatgagaaat | 10740 |
| caagtcaaat | atgccaagta | acatagtttc | tacttagagt | cagggttcac | tttttagcagg | 10800 |
| aacctcaaat | accacaaaat | ctgtcaagtt | ctaacatttg | tatctctcga | cagtacctga | 10860 |
| agttcctgtt | tctgtttcct | cagcccagggt | ttccaattca | gtgagcagaa | cgggtgactgt | 10920 |
| gttggtaaaa | gagcccat | acctgcccga | tcctgcagga | gtgttgagaa | tgcaaacagg | 10980 |
| cgggtctcca | catgacctgc | ggagtaatat | ctagtgtccc | taaagtcacg | gggtctctgg | 11040 |
| ggttagcctt | gaaaaaagct | aaagggttgca | tagagagaga | tttctatccg | ttcagagact | 11100 |
| cactataatt | ctctctttct | gtctctgtcc | ttcatctgtt | tctctctttc | tctctcactc | 11160 |
| tctctctctg | atacacacac | acacacacac | acacacacac | actcacactc | acacactcct | 11220 |
| gagtaaggga | aagtgtgagaa | gaaggtaaaa | cttcaactaa | atgaaaagaa | attgtatgaa | 11280 |
| ttatggtaag | cagggttggtt | tttagttcca | gtaaagatag | aaatatttag | attacttagg | 11340 |
| agaaaagtct | agctggtaac | acatgggaat | gtgctgtgtg | gaaaacaaaa | caaaacaaaa | 11400 |
| aatctaggct | tgtggttagg | tgaaggtagt | tcacctgtg | agacatggcg | atgggtgagc | 11460 |
| ttgggatgag | gagaaaggct | tctctgagaa | gattaagaga | gaaagattgt | ttaaaaatgt | 11520 |
| ttaaacatgc | tgggcactgt | ggctcacacc | tgtaatccca | acactttggg | aggccaagggt | 11580 |
| gggaggatca | tgaggtcagg | agttcgagac | catcccgccc | aacatggtga | aacctgtct | 11640 |
| ctgctaaaaa | tacaaaaatt | agccaggcgt | ggtggcggggt | ggctgtagtc | ccagctactt | 11700 |
| gggaggctga | ggcaggagaa | tggcgtgaac | ccaggaggcg | gagatgcagt | gagccgagat | 11760 |
| tgtgccactg | cactccagcc | tgggcgacag | agcaagactc | cgtctcaaaa | aaaacaaaaa | 11820 |
| aacaaaaaaa | aaacacacat | tgacaccagg | acggagttag | cacatcttta | cagggtgagac | 11880 |
| tctcagaccc | gagaaaatag | aggcacttta | gagctgagct | aatcccacag | ccacctcaac | 11940 |
| acacaaacgg | ggaatctgag | acccgcattg | gcaccgtgcc | tgaggttcta | aagcccagggt | 12000 |
| cttctgactc | gcctcttggt | cttcttcagt | actgtgggtg | gggggtgggt | gggggtgac | 12060 |
| attagctgat | gagaaagatt | ttggttttag | aaagatggag | ttaacataaa | cgaagggtgta | 12120 |
| ctgggactgg | tctcctctgc | tgacttcacg | ggaagcacac | acacgcacac | acacacacac | 12180 |
| acacacacac | acacacacac | atacacacac | ctgtccaaga | tcagaaaaaa | tcctctcat | 12240 |
| ccctgtagca | tgatcctgat | tgtaaaaaat | gagcccta | cagaagggca | gaagcatgat | 12300 |

| | | | | | | |
|-------------|-------------|-------------|-------------|-------------|-------------|-------|
| tgcctctcaa | gagatttggga | cgccactttt | tcatagttgg | tttttagctgc | tttgcgatat | 12360 |
| atactgaaat | aaatagaaaa | gggaaagaat | tgtaacctgg | attgacagac | aacaagccct | 12420 |
| gacagacaaa | aagcagataa | gaaataaaat | aaggaagata | acccataatg | taaaataaaa | 12480 |
| atagcacatt | gttgcatgca | ttgataccct | tttttttttt | tctttgagat | cttgctctgt | 12540 |
| ctttcaggcc | gaagtacagt | gtctcaatca | tagctcactg | cagcctccag | cttctgggct | 12600 |
| caagcaatct | tcccatctca | gccacccaag | tagctggggc | tgcaggcacg | aactatggtg | 12660 |
| cccagctgat | aattttttaa | aatagggaca | ttagtgcat | tagcaaattt | gagtgtctgc | 12720 |
| tgtgtatcaa | gcactgttct | gggcactggg | acagcacagg | gagcaaataa | acaaaagccc | 12780 |
| ctgcgctcaa | ggtgctcgta | ttctagaggg | agatgctgag | ttcacctccc | attaaaatgc | 12840 |
| cattctcaag | atccagtccc | tccacccacc | ccagccccc | gggttttggg | ggaaatttaa | 12900 |
| ctaagttgga | agattgataa | tatctccatt | cacatttggg | tatgatttta | atgaagggtg | 12960 |
| ctttttgggt | tttagggaga | agaaaatggc | ttccagata | gcactggaga | tcctcttcca | 13020 |
| ggtaaattgat | tgattctaaa | gctatctggg | ctaatagcta | gtgtggctga | ataaaagata | 13080 |
| atltgaggcc | agggctcggg | actcatgcct | gtaattccag | cactttggga | ggccaagggtg | 13140 |
| ggcggatcac | ctgaggctag | gagttcaaga | ccagcctggc | caacatggta | aaaccccgctc | 13200 |
| tctacaaaaa | atacaaaaat | tagctgggtg | tggtggggcg | ctgtaatccc | agctactcgg | 13260 |
| aggctgaggg | aggagaatcg | cttgaacccg | ggaggcggag | gttgcaagtga | gccaagatca | 13320 |
| caccactgca | ctccagcctg | gacaacagag | cgaaactcca | tctcaaaaaa | ttaaatataa | 13380 |
| taaaataaat | aatttgagac | tatgtttatc | attaacttta | aaatctgtac | tgcagaatag | 13440 |
| agcaactttc | tacctgcggt | gcactgcagg | gaaagccgta | tcttacaaga | cttcacaaaa | 13500 |
| gccttcaaag | agtattttct | ctgcactaac | cttcccttgc | atgtgagggg | cacggcaggg | 13560 |
| ttctgaatgg | ggcaggttta | ggatcaggcc | agtcgggact | gagtggattc | ttcttccctc | 13620 |
| tgagttctaa | gagccatagc | attgggtggg | aacatgctgt | ttgttgcttg | gtggaaggga | 13680 |
| ccagaagcca | gctgggtcat | ctctctgttt | gtgccttggc | cacttaggta | gccaaggag | 13740 |
| ccctcctgac | attaggtcag | gtgttagtcc | ctctcctttt | ctgcttttag | tgtgtttaag | 13800 |
| caaataaaca | ttaaagttca | tttctccccg | ctcccccttt | ttaatcataa | gacagacatg | 13860 |
| tttgcaatgt | ttaaattttct | cattaatcag | aagggatagg | gagtggaggga | gtaagcatta | 13920 |
| aaataagcta | gcaaatggcc | aggtgtgggtg | gtcacacact | gtaatcccag | gactttggga | 13980 |
| ggccaagggtg | ggcagatcac | ttgaggccag | gagttcaaga | ccagcatggc | caacatggca | 14040 |
| aaactccatc | tctactaaaa | atacaaaaat | tagccaggcg | tggtgatggg | cacctataat | 14100 |
| ctgagctact | cgggaggctg | aggcagagaa | ttgcttgaac | ccgggaggga | aagattgcag | 14160 |
| tgagctgaga | ctgcaccact | gcattccagc | ctgggtgaca | gagcaagact | ccatctcaaa | 14220 |
| aaaatgctag | caaaataata | ataataataa | taataaaaaca | tacctacca | acattttcta | 14280 |
| catcttgtaa | agcatacatt | gactgactga | agtcaccaga | gttttgtttc | tttctttctt | 14340 |
| aagcaggggtg | gggaacccgt | agagccctca | ggggcagcta | tcatcagccc | aggtaaccaa | 14400 |
| gctgaaaaac | cagaagggtgc | agtgcgtact | caactttttc | cccttagaaa | cacgatatta | 14460 |
| gaaaatacac | caataccaac | atgtgagcaa | cagttctctc | tggagggtgc | agttctgggt | 14520 |
| gatttttttt | tcattccata | gatttttttt | ttcttgagac | ggagtttcgc | actcttggtg | 14580 |
| cctaggctgg | agtgcaatgg | tgcgccacca | cgcccggtca | atltttgtat | ttttagtaga | 14640 |
| gacgggggtt | caccatgttg | gccaggctgg | tctcgaactc | ctgacctcag | gtgatccacc | 14700 |
| tgcttcggcc | tcctaaagtg | ctgggatgac | aggtgtctca | ctatgttgcc | taagcttttc | 14760 |
| tcgaacccct | gagctcaagc | ctcctccac | ctcagccatc | caaagtgctg | ggattacagg | 14820 |
| catgagccac | cacgcctggt | gagtttttat | tttctttcca | ctatccntat | atttctaaaa | 14880 |
| tttctaacat | gagctggtat | cagaactgcc | cctccgcatt | taatctgtgt | atacaaatgt | 14940 |
| atatataaca | aatgatcaca | tgttggtaan | gtataccttg | ctgcatgggtg | aaataaccaa | 15000 |
| ggaaacttct | aaaaggttaa | ctgtgggttg | cctgggtaat | gggagcatta | attttttcca | 15060 |
| tatgctcatc | tgaattttca | gatttgctat | gacaagcaca | tatttatttt | ctaattttta | 15120 |
| aaatctatat | ttaaactctt | taaagactaa | cacctacac | actaatgtgg | caggttagct | 15180 |
| aaaataaaaa | taaatacaga | aatttgttta | gaaatatttg | taaacccttc | aaggactctt | 15240 |
| ctgaatgata | gtcattatta | attagcaggt | taattttaat | caggcttctg | gtcatcttca | 15300 |
| aacatttttt | acttggtgca | aaatgaacca | ccagagtgtg | ggtttttttg | ttattttttt | 15360 |
| tgtttttttg | agacagagtt | tactcttgt | tgcccagggt | ggagtgcaat | ggcgagatct | 15420 |
| cggctcactg | caacctctgc | ctcctgggtt | caagcagctc | tcctgcctca | gcctcctcct | 15480 |
| gagtagctgg | gattacaggc | gccaccacc | acaccagct | aatttttgta | tttttagtag | 15540 |
| agatgggttt | tgccatgttg | gccagggttg | tcttgaactc | ctcacctcag | acgatccacc | 15600 |

| | | | | | | |
|-------------|-------------|------------|-------------|-------------|-------------|-------|
| cacctcagcc | tcccaaagtg | ctgggactac | agatgcacac | caccacaccc | ggttaatttt | 15660 |
| tgtattttta | gtaaggacgg | gggttcccc | tgttgccag | gctgggtctca | aactcctgac | 15720 |
| ctcaagtgat | tcacctgctt | tggcctccca | aagtgtctggc | attacaggcc | tccgccaccg | 15780 |
| caccacagccc | aacctgggtc | cttttgtatg | tgagagtttg | cttgtttttt | tcacgtgctt | 15840 |
| tctctactcc | agttttattc | tatgacaaaa | ttgaggccca | acatgattta | cttgccctgga | 15900 |
| tccaccaaac | ctgtcagtta | cttcccagtg | ctgctgccaa | cttaatgtct | ccttaaaagg | 15960 |
| atgctttaga | gaaaacgaaa | tcatgttgtt | tttccccttt | ggttaagaga | tcaaacgccc | 16020 |
| acaaaaagcc | cttgggtcag | tttcttagta | gataaaaata | attcttcgtc | actttctgaa | 16080 |
| agcggttaac | atataacctt | tatgatgaat | aatgtggtgt | gtgtgtgtgt | gcgcgcccc | 16140 |
| aattccaatg | agttatcaaa | gccagaaact | tatattttaa | atatgtttat | ttcccaacca | 16200 |
| cactggaaac | cacacacaga | aaaaaaaaa | agcatgatta | tacccctta | ataaccgtta | 16260 |
| ctgcagaagg | atgtgactct | ccttcaacac | ttgttggtat | tttacagcct | ccaaatctga | 16320 |
| ccatgtataa | ccacctggga | tagagtattt | ttatttcaga | accataatac | ttagctatct | 16380 |
| cggaagtgtc | caatataaaa | tgtttactct | ctaattggtt | tgaactaact | caagacctgg | 16440 |
| ttatcccggg | gagcatcctt | acaaatgatc | tgagagctaa | cagtcctctt | gcagcagtg | 16500 |
| agggaaacac | tcccgtggca | atcactctcc | aaaagccaga | atgtgcaaga | taaaagggca | 16560 |
| ccttccctgc | agggaggcac | attaagtcag | tctgtgatct | gctgccaca | tctgactgg | 16620 |
| agcgtttct | acgcctaact | aatcatgacg | tttgtgaatt | gtgaagcttg | ttgcaattca | 16680 |
| caattaactg | ttaattgacc | catattttat | aaccgcgcag | ccatgaactt | acaagttaga | 16740 |
| tacagacact | accagacatt | cactattttt | ttttacaatt | gttttaaatg | acattaatga | 16800 |
| gcatgcttga | ttcctgaact | cttctttaca | gtataatttt | aaaatatattg | agtgggatac | 16860 |
| gatggagagg | agggaggtgg | gggaagaaat | gccccatgga | aaaccactc | atcaggttga | 16920 |
| gagtgtggag | aagccctgtg | tatctgagaa | ctcttaatca | tccacagaca | tggtatctct | 16980 |
| caaagagaag | tgggtgtaat | tccaaaatct | aattttggca | ggcgctcctg | actaaatact | 17040 |
| taatctggag | atgtcttcaa | ggcaggcgga | ggttttcagt | cctggctgca | cattagaagt | 17100 |
| cccaggggag | ctttaaaaaa | ttcccacgtc | ctccctgcat | cccagactaa | ttaatcgggg | 17160 |
| tctccgaggg | tgggaccaca | catcagggtt | ttgtaaattt | ccctgggggt | ttgggtgggg | 17220 |
| tgggggtgga | ggcgtctatc | ctatggccaa | ggttgagaac | cactgctttt | taaaagactg | 17280 |
| tttgcttggt | tttgagatgg | ggtctcgtc | tgtcaccag | gctggagtgc | agtggcgcaa | 17340 |
| tctcagctca | ctgcaacctc | tgcctcctgg | gctcaagcaa | ttctcctgaa | aaaggctggt | 17400 |
| ggttattaat | gcttccccac | agctattcta | ttcattgttg | catgcttctt | acgtgtgcta | 17460 |
| ggatgggagc | tttaaaggat | tacctcattt | aatcctcaca | accaccttgt | gagagaggtg | 17520 |
| tcattatccc | tgtttggaga | gtgagacagg | ggcttagcaa | gctcagtaac | ctgtccaagt | 17580 |
| cacacatctg | catgggggta | gctgctgcta | aagctcatgc | cgttaatctc | catggtacac | 17640 |
| ggtgtcctct | ccatagcaat | cttgcggtg | ccttggttaac | acaaaaaaa | cttgcattcag | 17700 |
| ctggtttgac | aattttctaga | taaagagctc | ttttcgggct | gctaagaagc | ctaatttttc | 17760 |
| atttgatttt | cttcttgaac | tgtgtcacac | tcctcattca | tttgatata | tcatcaaata | 17820 |
| cttattgagc | acctgctgtg | tgcctgggtg | gcagcagtga | caccagacat | ccaaagtctt | 17880 |
| tttctcttta | gagcttatte | tatctgggag | agacagataa | taaacacaaa | atcagtaagt | 17940 |
| cattttatat | ggtggtaggt | gccttgagga | agatgagcca | ggttaatggg | attaagcctg | 18000 |
| gtagggggag | ggtgccactt | tagctcgga | agggtagcga | gacccaaaca | atgcaaagga | 18060 |
| cccggcccg | ggagatctaa | gacaggagga | tgccagggac | aggaagttgc | tggggcaaag | 18120 |
| cccctgaggc | tggactgagc | tcagtgttct | aggacggg | tgggcagtga | ggagcagcag | 18180 |
| aggaggtgag | ctgggagata | gcctggggac | tctttcttct | gcctccttca | aaaaataaaa | 18240 |
| ctagccaggt | gtggtggctc | acacctgtaa | tcccaacaat | ttgggaagct | gatgtaggtg | 18300 |
| gattgcttga | gtccaggagt | tcgagaccag | cctgggcaac | atagtgagac | ccctcccccc | 18360 |
| atttctacca | aaaaatcaaa | aaattagctg | ggcccggtgg | cgtgcgcctg | tggtcccagc | 18420 |
| tactcaggag | gctgaggtgg | gagcattgtt | tgaacccggg | aggtggaggc | tgcagtgagg | 18480 |
| cgtgattgtg | ccactgtact | ctagcctggg | tgacagagtg | agactctgtc | tctaaataaa | 18540 |
| taagtaaate | tagaacctaa | catcttgagg | tgcagtggca | ccaccatggc | tactgcagc | 18600 |
| ctcaatctcc | tgagctaate | gagcctcccc | ttcagcctcc | tgagtagctg | ggactatagg | 18660 |
| cgtgcaccac | catacctgaa | taatcaaaac | ctaactctt | taaagaacat | tggcataaga | 18720 |
| cttggaacaa | atggcatctt | gtccctcctc | tcatttagtc | caagcgatac | aggaaatgct | 18780 |
| gccacctcca | ttttatagat | gaggagtctg | acgttcctag | aggttcaatg | ccctgaaacg | 18840 |
| tcaagccttg | aggaagttgg | agcactggga | ttcgaagagc | accatccaat | acagaccag | 18900 |

| | | | | | | |
|-------------|-------------|-------------|-------------|-------------|-------------|-------|
| aatcaggatg | atttgggatt | atgcttgtca | aggactcagg | gcagggtac | catacattag | 18960 |
| gcacaagaat | tttgatagtg | ataattactg | tgttcattgt | cacttcatca | tgacagttac | 19020 |
| cgtgatgata | agaaacctgg | cccttcttca | cctgacaaag | gctttcttcg | tttgagccac | 19080 |
| tgctcaaacg | agactgacca | agaataaatc | ctcggggcct | tggcctttaa | aataggaagt | 19140 |
| catcataaat | gacttgatgt | ggtgtgtttc | attcttgcct | tgcaccagtg | gaaaatatac | 19200 |
| aggtcaagca | tcaaaacatg | gcaaatgggg | accccaatta | ttagagaatc | taagttaatt | 19260 |
| tttatgtata | attaattatt | caacaaccct | ctcctctcca | aaccaataat | taatccatct | 19320 |
| tttgtatttt | aagaccaatt | ctgtagtatt | ttccatcaat | atctattttac | tgctagcaga | 19380 |
| tatcagctac | attctttctc | ctttaataga | agttccctct | ttaggtatta | agattcatta | 19440 |
| aacaacaata | acaaatctac | cttgccctcc | agggacaatg | cacagttctc | attcattttgt | 19500 |
| tcatttagca | gataattttt | gaatttccac | tgtacagcag | ccctgtgcct | gtgggtggcc | 19560 |
| tgttatttga | gaagcatcaa | ataataatct | catttttttg | ctgggtgtga | tagctcacgc | 19620 |
| ctgtagtccc | agcacttttg | gaggctgagg | cgggtggatc | acttgaggat | gggcgttgga | 19680 |
| gaccagcctg | gctaacatgg | tgaacctctg | tctctattaa | aaatacaaaa | attagccagg | 19740 |
| tgtgggtggc | gacacctgta | atcccagcta | ctcgggaggg | tgaggcagga | gaatcgcttg | 19800 |
| aacctgggag | gcagaggttg | cagtgcagccg | agatcgcccc | attgcactcc | agcctgggca | 19860 |
| acaagagcga | gactccgtct | caaaaaacaa | aacaaaacaa | gacaaaaaaa | aacccaacaa | 19920 |
| ataaaataaa | taatcccatt | tttctccatt | tttgagaaag | atttcttttg | tctgaagtct | 19980 |
| ttctctcccc | tctccgaggc | attaccaggt | ttaacctttc | atgtataata | tatatgatag | 20040 |
| ttattttaaag | tatagcagga | caaaatgtat | ttgataggag | aaaaccttgt | ttgctctgtg | 20100 |
| ttaagtcctc | cagagagcta | attagagttt | gtgattctaa | aaggcaacta | tagattcact | 20160 |
| tatattagca | gttcatgtag | attccagtta | aggaaatggt | ttgtcacttg | tgttattgaa | 20220 |
| aacacacaca | gggcgagcac | tgtggcccat | gctggtaatc | ccagcgtttt | gggaggctga | 20280 |
| ggtgggcaga | tcacgggggtc | aggagtttga | gatcagcctg | gccaacatgg | tgaaaaccgc | 20340 |
| tctctactat | aaatacaaaa | aattagctgg | cagtagtggc | aggcgctctc | aatctcagct | 20400 |
| actcgggagg | ctgaggtagg | agaatcgctt | gaaccagga | gtcggagggt | gcagtgcgtc | 20460 |
| gagatcgcac | cattgcactc | cagcttgggc | aacaagggca | agactccgtc | tcaaaaaaaa | 20520 |
| agaaagaaaa | cacacacaca | aaaaaacttt | agtagatctt | tggcatatt | atTTTTTaaa | 20580 |
| ataaactgat | aatgggtgat | atgattgttc | aaagaaataa | gagcttttca | taaactcagt | 20640 |
| ttaaagaaac | tttacaggcc | gggcgcgggtg | gctcatgccc | gtaatcctag | cactttggga | 20700 |
| ggccaaggcg | ggtggatcac | ctgaggtcaa | gagttcgaga | ccagcctggc | caacatggta | 20760 |
| aaagcctgtc | tctattaaaa | aatacaaaaa | ttagccaggt | gtgttggctg | gcgcctgtaa | 20820 |
| tctcagcaac | tcaggaggct | gaagcaggag | aatcgctgga | acctggtagg | cagaggttgc | 20880 |
| agtgagacaa | aatcgtgcca | ttgcactcca | gccccagctg | acaacagcga | gactccatct | 20940 |
| caaataaata | aataaataaa | taaataaata | aataaataaa | ggagctttac | agaaaccttc | 21000 |
| tgatgttttt | ttcttcttga | cgataacatt | gccaacactg | aatcttacia | agataagaca | 21060 |
| agaaagggac | cttcagacac | cattacatgt | aattctggac | ttagtggttt | aaatccttat | 21120 |
| ttttctatga | cattaaaaaa | atgtatat | taggccaggc | acagggtcca | cacctgtaat | 21180 |
| cccagcactt | cgggaggccg | aggcaggtgg | attgcttcag | cccaggagtt | caagagcagc | 21240 |
| ctggggaaca | tagtgagacc | cctgtcccta | cagatttttt | ttttttgttt | gagatggagt | 21300 |
| tttgctcatg | ttgcctaggc | tggagtgcag | tggcacgata | tgggttact | gcaacctctg | 21360 |
| cctcctgggt | tcaagcaatt | ctcctgcctc | agcctcccaa | gtagctggga | ttacaggcat | 21420 |
| gtgccaccac | accggctaa | ttttgtattt | ttggcagaga | ctgggtttct | ccatgttggt | 21480 |
| caggctggtc | ttgaactccc | aacctcaggt | gatctgcctc | cctcagcctc | ccaaagtact | 21540 |
| gggattacag | gcgtgagcca | ccttgcccag | cctacaaaaa | gttttaaaaa | attaaaaaat | 21600 |
| tagttgggca | tggaggtgca | tgccagctac | tgggagggtc | gaggcaggag | gattgcttga | 21660 |
| gcccataag | tggaggtgc | agtgagccat | aattgcagca | ctgcactcca | gcctgggcca | 21720 |
| tagagcaaga | ccctgtctca | aaaatatata | tagtatccaa | ataaacacaa | taattacaga | 21780 |
| aaattgaaaa | gtgcccataa | gcaaaaaaaa | aaaaaagaaa | aaattaatca | cctgcgttct | 21840 |
| catcacccag | aattaacat | tgttaatat | tttgttatag | atccttccaa | acttttctcc | 21900 |
| atgcttgtga | ttgtatttat | tatacatgat | ttacagggat | ataaacgact | gtattattag | 21960 |
| tcattagaag | aactggatta | tggccgggca | cgggtggctca | cacctgtaat | ctcagtactc | 22020 |
| tgggaggctg | aagtgcagc | atcatgaggt | caggaaatcg | agaccatcct | ggctaacaga | 22080 |
| gtgaaacccc | gtctctacta | aaaatacaaa | aaattacctg | ggcgtgggtg | caggcgctctg | 22140 |
| tagtcccagc | tactcgggag | gctcaggcag | gagcagagat | acctatctgt | tctcaggatt | 22200 |

| | | | | | | |
|-------------|-------------|-------------|------------|-------------|-------------|-------|
| ttaaggtggt | gcgcggaaat | aagaaaaccg | tacagtgttt | ctcactacaa | agcaggggtca | 22260 |
| ggagatgcaa | acaaactgat | gtgggggttc | caagtgaggt | ggaattccag | acagggggccg | 22320 |
| ggaagacttc | gtggaaaggg | agaatctgag | gtgggttttc | taggatgggt | aaagttcatt | 22380 |
| agaggaagag | aagtgaaca | gaggaagttc | ggtgagaggt | agaggggaagg | cgttctgac | 22440 |
| atgaaggaaa | cactagaaaa | ggtatggaga | tagaaaaaga | taaggcctga | ttttttaacc | 22500 |
| taccacttaa | aaaaaatcct | tgaaaagaga | tttttaaac | gaataacttg | tgctgacaaa | 22560 |
| ggtgaaatga | ccgggcgcgg | tggtcacac | ctgtaatctc | agcacattgg | gaggctgagg | 22620 |
| cgggcagatc | acttgagctc | aggagtttga | gaccagcgtg | gccaacatgg | caaaactcca | 22680 |
| tctctactaa | aaatataaaa | attagacggg | tgtgatgggt | ggtgcctgta | gtcccaacta | 22740 |
| ctcaggaggc | tgaggcagga | gaattgcttg | aaccgcagag | gcggaggttg | ctgtgagctg | 22800 |
| agattgtgcc | actgcactcc | agcctggata | gcaggatgag | actgtctcaa | aaaaagaaag | 22860 |
| aaaaggaaa | aaaaaaaaat | ccgtactgta | aactggtaaa | ggctttcttt | ctggagagca | 22920 |
| atttggggca | catgcaccag | tagccttaga | aggctcatgc | ttttgacct | attatcctat | 22980 |
| tagtgggtgag | atgattaaag | atgtggcccc | aatttatgtg | aaaggtatgc | atcacatctt | 23040 |
| cactcataat | caggagaggt | ggggaaaacc | ctagctgtta | atagtttatc | caaaatccat | 23100 |
| atatatatgt | gtgtgtgtgt | gtgtgtgtgt | gtgtgtatgg | atttatatat | atatataaat | 23160 |
| ggatatatat | atatatctgg | atggatatat | aaatatgata | tatatatgtg | tgtgtgtgta | 23220 |
| tatatatatg | tgtatatatg | tatatatata | tgatggaata | ctatttagcc | ataaaaagga | 23280 |
| atgaattaat | ggcattcgca | gtaacctgga | tggaactgga | gaccattatt | attttatttt | 23340 |
| atttattttat | ttttgagacg | gagtctcgct | ctgtcaccca | ggctggagtg | cagtggctcg | 23400 |
| agctcagctc | actgcaagct | ccacctcccg | agttgacgcc | attctcctgc | ctcagcctcc | 23460 |
| tgagttagct | ggactgcagg | cgcccgccat | cacgcccaga | taactttttg | tatttttagt | 23520 |
| agagactggg | tttcaccgtg | ttagccggga | tgtctccat | ctgctgacct | catgatccac | 23580 |
| ccgcctcggc | ctcccaaagt | gctgggatta | caggcgtgag | ccaccgcgcc | cagcgagact | 23640 |
| gttattctaa | gtgaagtaac | tcaggaatgg | aaaaccaaac | atcgtatggt | ctcactcata | 23700 |
| agtgggagtt | atgctatgag | gacgcaaagg | cataagaatg | atacgataga | ctttggggac | 23760 |
| tcagggaaaa | ggtgggaagg | gggtgaagga | taaaagatac | aaattgggtg | cagtgtatac | 23820 |
| tgctcgggtg | atgggtgcac | caaaatctca | taaatcacca | ctaatagaact | tactcatgta | 23880 |
| accaaatacc | acctgttctc | caataaacca | tggaatataa | aaaagaaaaa | agaaaaagta | 23940 |
| ccctggaaaa | aaaattttctc | cctggccagt | cacggtggct | catacctgta | atcccagcaa | 24000 |
| ttcgagaggc | tgaggcagga | ggatcacttg | agcccagtag | ttcaaaacca | gccagtgcaa | 24060 |
| catagtggga | ccctgtctca | aataaaatct | aaaaattagc | caggtgtggt | ggtgcatgtc | 24120 |
| tgtgggtcca | gctactcagg | aggctgaggt | gagagtattg | cttgagccta | ggaggttaag | 24180 |
| gcggcagtg | gccgtgattg | tgccactgcc | atccaacctg | ggcaacaaag | caagaccctg | 24240 |
| tctcaaaaaa | aaagaaaaaa | aaaacctctc | tattcgctct | ttaagaatac | ctgggcttct | 24300 |
| ctgtgtacac | ttaagcttca | ttggagtctt | tagacttttt | ttttgctgta | tctgtccagt | 24360 |
| taccaagtcc | cagcttctac | tccatgctcc | ccatgctctc | ttcctatttt | attttccatg | 24420 |
| actgcctcgg | tataacttgt | gctcaaccaa | actggactac | tcaattccct | gcattttctt | 24480 |
| ttttaaagtt | taatcaaaaa | aaaaaagaaa | actggctggg | cacagtgggc | ttctgcccac | 24540 |
| aatctcgggt | ctttgggaaa | ctgaggcagc | aggattgctt | aaggccaaga | gttcaagacc | 24600 |
| agcctgggtg | acataggcaag | acctccatct | ccacaaaaaa | atttaaaaat | tgactgagtg | 24660 |
| tgatgggtg | cacctagtcc | cagctgcttg | ggaggctgag | gcaggagaat | tgcttgagcc | 24720 |
| caggagtcc | aggttatgat | gagctatgac | tgtgccaccg | cactccagcc | agggtaacag | 24780 |
| agtgggactg | tctcaaaaaa | caaaacaaaa | tcctaatat | aatctcagtg | tgctttttta | 24840 |
| gtatgccata | tatatatata | tatatatata | tatatatata | tatatatata | acattttctt | 24900 |
| tatccactca | ttgattttca | tgtagtctca | atcgtagaat | tcatacatte | tttctatctt | 24960 |
| ccatctttca | cataacatca | caaacatttt | ctaggttgcc | atattgtctt | catagttact | 25020 |
| taaataatat | tccatcaagt | agcacaatca | tttatttcac | tagtctctca | actgtagaca | 25080 |
| ttttgggtgt | ttttgaaact | taataatgta | aataacaccg | tgataacaat | gtttatgtaa | 25140 |
| attcatattt | tggattatct | ccttaggggtg | gattcccaga | agtcacatta | gtaggtcaaa | 25200 |
| gagtatgagc | ctattttcaa | ggctcttggt | ttattacctt | ttaatttcca | cttgccctcaa | 25260 |
| tattgctgg | ttgctccctt | atgatcacca | gagttactcc | gtcgggtccaa | attctttacc | 25320 |
| ttccgaaact | gggaaggcca | tgactcaatg | ttatatatat | agtaaaggct | actataacct | 25380 |
| tccccagaat | tttccaagcc | agtgggtctct | aaagtgaact | ttggctgtta | aaatctgaat | 25440 |
| tcagagggtt | catgagactc | agtgttggtg | tagaatttaa | gctccttaat | ttgccacgtt | 25500 |

| | | | | | | |
|-------------|-------------|-------------|-------------|-------------|-------------|-------|
| gttttagacac | cacttaatac | tttattgcaa | atgacttgtc | aacgcctctc | acctacaaac | 25560 |
| ttcatcctcc | tacaaatata | cctcctgcta | atcaaagtag | gctacagttg | agtctttaag | 25620 |
| tttcagtaga | aagatggccc | ttcctctggg | gtaggcgcat | gctcttcatg | ctgaagctca | 25680 |
| gctgaaaagc | ctcctgctga | gttttctgcc | tctttccctc | ccactgcaca | caccccaggg | 25740 |
| tggtggcgcc | acttcaaagg | gagcctgtgg | atgaagaaaa | cacaggtaaa | ggcagagggc | 25800 |
| tcataagggg | gccataaatt | taaaaagtta | agattcctgg | cactatcaac | tctcacttgt | 25860 |
| tttcaaatat | gcataatggag | tggatattcc | agttttcatg | tctgtgttgt | tgtttttaaa | 25920 |
| aaaagacctt | tcaaagaact | gtgcattttt | tacaggtctga | caggctgtgt | ttggtgttaa | 25980 |
| actgtcaggg | ctgactggtc | acttggaag | ggcaagggct | gaggtgcatg | caagtgtcgg | 26040 |
| ctggttactc | acagacacag | cagccccctt | taccccgag | agagttctgt | ttgctggagc | 26100 |
| ccttattctg | gccagcagtg | tcacaaatgc | acactgtaag | acatagacag | tcttggaag | 26160 |
| aaagggaaac | tggttttaaa | aattcttact | ccttctagca | aagcaattca | tctttggcta | 26220 |
| taaagaataa | cacagccagg | tgcggtggct | catgcttgta | atcccagcac | tttgggaggt | 26280 |
| caaggtgggc | agatcacttg | agtctaggag | ttcaagacca | gcctgggaaa | catggtgaaa | 26340 |
| ccccacctct | acaaaaaaa | aaaaaaagaa | agaaagaaaa | gattagccag | gtttggtggt | 26400 |
| acgtgcctgt | agtcccaggt | actcggggaag | ctgaggtggg | aggatcgctt | gagcctggag | 26460 |
| ggcgagaggt | gcagtgaacc | gagatcatgc | cactgcactc | cagcctgggc | aacagagtga | 26520 |
| cacctgtgat | caaaaaaaaa | aaaaaaaaaag | aacagtaaca | cattattaga | aatgagcatt | 26580 |
| ctgaggccag | gcacggtggc | tcatgcctat | aatcgagca | ctttgggagg | ccgaggcggg | 26640 |
| tggatcacaa | ggtcaggaga | tcgagaccat | cctggctaac | acggtgaaac | cccgtcttta | 26700 |
| ctaaaaacac | aaaaaattag | ccgggtgcag | tgccgggtgc | ctatagtccc | agctactcag | 26760 |
| gaggtcgagg | caggagatag | gcgtgaaccc | ctgggaggcg | gagcttgacg | tgagccgaga | 26820 |
| tagtgccact | gcactccagc | ctgggcgaaa | gagcgagact | ccatctcaaa | aaaaaaaaaaa | 26880 |
| aaaagaaaga | aacgagcatt | ctgaaatagt | cttccatagt | atgcttttga | caattcagca | 26940 |
| ggaaaataaa | ggatgtaaga | aatgaatgca | tatgttaggc | ctcttggtga | cctgtggact | 27000 |
| aaattgtttc | tccttcgaga | gatcagcaag | gacaactcct | gcaaagaaaa | ctgtacttgt | 27060 |
| tcctcctgct | tgctccgggc | ccccaccata | agtgaacttg | tcaatgatca | ggacttacta | 27120 |
| gacgtgatca | ggataaagct | ggatccgtgt | cacccaacgg | tgaaaaactg | gaggaatttt | 27180 |
| gcaagcaaat | gggggatgtc | ctatgacgaa | ttgtgcttcc | tggagcagag | gccacagagc | 27240 |
| cccaccttgg | agttcttgct | ccggaacagt | cagaggacgg | tgggcccagct | gatggagctc | 27300 |
| tgcaggctct | accacagggc | cgacgtggag | aaggttctgc | gcagggtggg | ggacgaggag | 27360 |
| tggcccaagc | gggagcgtgg | agacccctcc | aggcacttct | agagctcttc | ttcttccctc | 27420 |
| attggcctct | ccggatgttg | aaacaaccac | aggtaagaa | ggaatgtgaa | tctgttgttt | 27480 |
| tataagagtt | taggacaagg | acgtggaaca | gtggacactg | gttttcccca | aagctggcag | 27540 |
| ttttgtggag | gggtagcttg | tttcggtggg | ggatctctgt | ttattttttg | acatctgtta | 27600 |
| taatttaata | ttcaaactctg | gaattaagaa | aacatatttt | ctagtatcct | ctaagggccca | 27660 |
| aagtcctaca | atcggaatgg | attcatgcca | cgttgaagat | aaaattatcc | tctctctgaa | 27720 |
| atacggtaaa | gatttaataa | ggtcctgaga | ctgttgatag | ccccagacat | acccacagca | 27780 |
| ttatatgtaa | catctctcct | gatcagtggc | attcccacgg | tttcaaagaa | aacagctaca | 27840 |
| aggaatgctt | acctgagtgt | ctgcagcacc | ctccacttct | ctcctaggca | atgagaccca | 27900 |
| gtggctagaa | attcaccatg | tctattctca | agatccatgc | cagggagctc | tttgactctc | 27960 |
| gtgggaatcc | cactgtttgag | gttgatctct | tcacctcaga | aggctctctc | agagctgctg | 28020 |
| tgcccagtg | tgcttcaact | ggtatctatg | aggtcctaga | gctccaggac | aatgataaga | 28080 |
| ctcgctatat | ggggaagggg | gtctcaaagc | ctgttgagcc | catcaataaa | actattgcac | 28140 |
| ctgtcctggg | tagcaagaaa | ctgaacgtca | cagaacaaga | gaagattgac | aaacttatga | 28200 |
| tagagatgga | tggaaacagaa | aataaatcta | aatttggtgc | aaatgccatt | ctgggagtg | 28260 |
| ccctcgctgc | ctgcaaagct | agtgtctgtg | agaagggggg | tcccctgtac | caccacatcg | 28320 |
| ccgacttgtc | tggcaactcc | aaagtcatct | tgccagtcct | ggtgttcaat | gtcatcaatg | 28380 |
| gcagttctca | tgctgtcacc | aagctggcca | tgcaggaggt | catggctctc | ccagtcgggtg | 28440 |
| cagcaaactt | caggggaagcc | atgcccatgg | gagcggaggt | ttaccacagc | ctgaagaatg | 28500 |
| tcataagga | gaaatatggg | aaagatgcca | ccggtgtggg | ggatggaggc | gcgtttgctc | 28560 |
| ccaacatcct | ggagaataaa | gaaggcctgg | agctgctgaa | gactgcgatt | gggaaagctg | 28620 |
| gctacactga | taaggtgatc | gtcagcatgg | acgtagaggc | ctccgagttc | ttcaggtctg | 28680 |
| gaaagtatga | cctggaattc | aagtttctcg | acgacccac | caggtacatc | tcacctgact | 28740 |
| gtctggctga | cctgtacaag | tccttcatca | aaaactaccc | agtgggtgtct | actgaagatc | 28800 |

| | | | | | | |
|------------|-------------|------------|-------------|-------------|------------|-------|
| cctttgacca | ggatgactgg | ggagcttggc | agaagttcac | ggccagtgca | ggaatccagg | 28860 |
| tagtggagga | tgatctcaga | gtgaccaacc | caaagaggac | agcctcggcc | gtgaatgaga | 28920 |
| agaagtgcaa | ctgcctcctg | ctcaaagtga | accagattcg | ctctgtgact | gagtcccttc | 28980 |
| aggcgtgcaa | gctggcccag | gccaatgggt | ggtgtgtcat | ggtgcctcat | cattctgggg | 29040 |
| agactgaaaa | taccttcac | actgacctgg | tgggtggggct | gtgacctggg | cagctcaaga | 29100 |
| ctggtgcccc | ttgctgatct | gagcgcttgg | ccaagtacaa | ccagctcctc | agaattgaag | 29160 |
| aggagctggg | cagcaaggct | aagtttgccg | gcaggaactt | cagnaacccc | ccagccaagt | 29220 |
| aagctgtggg | caggcaagcc | cttcagtcac | ctgggtggcta | attagacccc | tcccttgtgt | 29280 |
| tcaactccgg | cagctcaaga | cccccgagca | acatttgtag | gggcccgtgc | tagttagcta | 29340 |
| cccttgcccc | ccgccgtgga | gttcgcacct | cttccttaga | acttctacag | aagcaggttg | 29400 |
| cagtgaagcg | agattgcgcc | actgcacacc | agtttgagga | cagagtgaga | gtccgtccca | 29460 |
| gaaaaaaaaa | aaaaaaaaaa | gaacttntac | agaagccaag | ctccctggag | ccctgttggc | 29520 |
| agctctagcc | ttgcagtcac | gtaattggcc | caaatcaccc | gagccacgtg | accctccagt | 29580 |
| gtcatctccg | gggtggccac | aggcaagatc | cccagtgatt | ttgtgctcaa | aataaaaagc | 29640 |
| ctcattgacc | catgagaaaa | aagaaaacag | caatgagaag | tgaccctgtc | ttgttggttt | 29700 |
| attacttttt | ttgtttataa | gtacttttgg | gaattaacag | gatgctagta | ttacatgggt | 29760 |
| atactcttca | gaacacctgc | cccatctttt | ttatgcaagt | atgtttacaa | tcagtggact | 29820 |
| atcagtaatg | tcatattgctc | aaatattttt | taaagacctt | cagaaactga | tggttattgg | 29880 |
| gaaaacagtc | aggaagtagt | gaggtaatca | aggccatggg | aatagtgttt | gacaaagaga | 29940 |
| gtactccaaa | tcccttttgg | ttaccagga | ctttaaaaaa | gagagtactc | catcacacct | 30000 |
| gtaatcccag | cacttttgga | ggccgagggc | ggtggatcac | gaggtcagga | gatcgagacc | 30060 |
| atcatagcta | acatggtgaa | accccgctct | tactaaaaat | acaaaacatt | agccgggtgt | 30120 |
| ggtggcgggg | gcctgtagtc | ccatctactc | aggaggctga | ggcaggagga | tggttgaac | 30180 |
| ccaggagggc | gacttgcagt | gagccgagat | agcaccactg | cactccagcc | tgggcgacag | 30240 |
| agcaagactg | tgtctcaaaa | aaaaaaaaaa | aagagtgtct | caaatctcct | ttgggttacc | 30300 |
| gggactttta | aaaatttaat | gtgatagtta | ggccgggtgt | ggttctcacg | cctgtaatcc | 30360 |
| tagcactttt | ggaagctgag | gcggttggat | catttgagg | caggagtggg | agaccagcct | 30420 |
| ggccaacatg | gcgaaacccc | gtctctacta | aaaatacaaa | aattagccag | gcgtgggtgg | 30480 |
| gggcgcctgt | aatcccagct | cctcgggaaa | ttgaggcact | agaattgctt | gaaccagga | 30540 |
| ggtggagggt | gcagtgaagc | gagattgcgc | cactgcactc | cagcctaggc | aacagagcga | 30600 |
| ggttccatct | caaaaaaaaa | aattgtaata | ataataataa | caatgtaata | tttacttttt | 30660 |
| catcctttat | ataaggtgga | gtgcttcacc | cctgagatga | agctcagtta | agaaataaat | 30720 |
| gaaaatcccc | taacctattg | gtgaaaggta | accaccccc | gctcctacta | gcccacttta | 30780 |
| aaacaggacc | ccatcacact | acacagcagt | ttagccaaga | aaaggggggt | tttatgtgga | 30840 |
| cactgggagg | gaagggatcc | cttcaaatcc | aaactttaaa | ggattttaaa | caaataaaac | 30900 |
| atttggttca | agaatagctt | gatgttttta | tttgatgatt | ttggagaaag | gaaagtgtgg | 30960 |
| ggcataatgg | ggtttgttat | tggaaagatc | agattttcta | ggtaatttgg | gtggagaaag | 31020 |
| acaaaaggca | aagctttgac | tgacaattcc | atgaaagtgc | tatttgggtt | tggttatggg | 31080 |
| cttagaaaaa | taagacactt | agttcaattt | ggaaggattc | tgtataagtc | cctgattaaa | 31140 |
| ataagcaaaa | atgatgaata | acactgattc | agtgcacacc | aaagattagg | attaactcaa | 31200 |
| aagaaagtta | ttttctaaac | caccgtgatt | ttttccactg | acaattacag | cggttttcat | 31260 |
| taggttgctg | acacatgaag | tcagcctcac | catcagttgc | aaactctaaa | ctagcaaaat | 31320 |
| ctattacaga | gacatactta | tcacttctga | tttagtgcta | atctcaccca | gctcatcttc | 31380 |
| tcttgtcaga | tttatgagat | aaatgtcaga | tttatcacca | gatataattga | aagtaacagc | 31440 |
| cagtaataaa | atgtgagatt | ttaaaaata | gattcttttg | caaattgggt | ttcagtggag | 31500 |
| caattattaa | acatttttgt | cagccagggt | ccaggcactg | tacagaagct | gttaggaggt | 31560 |
| ctcaccatct | acgaatttga | tttgatgtat | tgtattctca | ttagctatg | tgtgacacat | 31620 |
| tgtcatttat | tagcccagaa | tttaaaaagc | tgtggttggt | tagtggtggg | ggtagcagac | 31680 |
| cccagcagtc | tgatgggtct | cactccttcc | atcctgccac | cccctgggga | tgcaaagact | 31740 |
| ggatctcagg | gtgacaatct | tcttgccgac | gactgcctgg | ccaagtgcct | ccagaaagcc | 31800 |
| ccttccttcc | cccattttcca | cccaggccca | cttgctacct | cagcctaaca | ccagcctgca | 31860 |
| cagtctacgg | ccaccatcca | ggcagtgagg | gaggggaaag | ggaggagggt | ggaagggaaa | 31920 |
| acccctttct | atacctctcc | tcagcctgct | ctttcctcct | cccacctctg | agcctccgcc | 31980 |
| tccccagac | agagacagaa | aagatggaag | aacaggtggg | acctccaccc | ccaccccaag | 32040 |
| ccttcatccc | ggtggagggg | gatgggaaga | tttctctcat | ttcaagagac | tcctccacct | 32100 |

| | | | | | | |
|-------------|-------------|-------------|------------|------------|-------------|-------|
| cagactgaca | aaaggcagag | gcctggcaag | aagaaagggc | accctgggga | agaagggcat | 32160 |
| tgaatatagca | cctgccgggc | cgggcacggg | ggctcacgcc | tgtaatccca | acacttttggg | 32220 |
| aggccgagggc | gcgtggatca | cggggtcagg | agttcaagac | cagcctggcc | aagatggtga | 32280 |
| aaccccgctct | ctactaaaaa | tacaaaaagt | agccaggcgt | ggtagcgggt | gcctgtagtc | 32340 |
| ccagctactc | cggaggctga | gacagggaac | tgcttgaact | gggaaggtgg | aggttgcaat | 32400 |
| gagccaagat | cgtgccatgc | actccagcct | gggcgacaga | gtgagactcc | atctcaaaaa | 32460 |
| acaaaaacag | aaatagcacc | tgccccacc | ccctgccgcg | cctccttccc | gcccccgctc | 32520 |
| tttcctagac | ttcactcaag | tcctctgctc | agaggaagcc | ctgctctact | gaaagccaca | 32580 |
| aggccattct | cggtgccctg | ggacagcagc | ccaagacgtg | ggcttctaac | tgctccgaa | 32640 |
| ggggccacag | cagcaaacat | aaataaaaaat | agtaaaatgt | tcttaaatta | taaattttaa | 32700 |
| atlttgaaaa | tttagtgagc | acagcttcta | gggggcagtg | ttccaaaatt | ccaaccacaa | 32760 |
| aagtgcagtc | tcaaaactga | ctgtaaacccg | aacataccat | ctcatctcag | acacagctat | 32820 |
| tggttcacgag | tgctcagtgga | actttcctcc | cttgagatgg | acaaaaaacg | tcaagcaaga | 32880 |
| tgacatttgc | tgatttgcag | gcttcaggca | gataagatac | gggcagagtt | gagtgtgcgc | 32940 |
| ctttaccctt | aaattcagga | atagcaggaa | cagcaggaaa | aacgtaggac | cacagcgtac | 33000 |
| gtcccacttg | tctttcattt | tgatatcatt | atltccagag | tcctgattgc | tagtcatgtc | 33060 |
| taacactgga | tttattatca | tctcattgct | agcatggcta | ggaaagcttt | gaacatcctt | 33120 |
| atcatttctat | tttaattcct | attataattg | catggggaag | ttccagggtg | gaaaaatttc | 33180 |
| cttttctttc | tttttttttt | tttaatagga | gagttggctg | ggcacgggtg | ctcacgcctg | 33240 |
| tgatcccaac | actttgggag | gccaaggcgg | gtggatcacc | tgaggtcagg | agttcgagac | 33300 |
| caacctggcc | aacatagtga | aaacctatct | ctactaaaaa | tacaaagtta | gctgggtatg | 33360 |
| gtggtgcaca | cctatagtcc | cagctactgg | ggaggtcag | acaggagaat | cacttgaata | 33420 |
| cgggagcgag | cagtgagcca | agatcatgcc | actgcactcc | aacctgggag | agacagagtg | 33480 |
| ccatctcaaa | aaaaacaaac | aaaagagttg | atataaaatt | gctgttataa | tttgactgta | 33540 |
| ctgtttcttg | cacatgttga | catctgtaat | gactggagtt | tatgaaaatt | tttgatgagt | 33600 |
| aggagcatac | cattaacaga | gagaaattta | atcaaaagat | ttttaaagtt | ccttcagagt | 33660 |
| ccagactttg | actaagtgtg | gtatgattta | tatctatgtt | gcatacaaaa | atatcaaaca | 33720 |
| gtaattccca | actgaaatac | aagtatcaat | caattgtgtg | acaatgcaaa | atcatttaat | 33780 |
| ttaaagttaa | tttatagcaa | atgagtactg | taatagcata | agcatgccga | tactttacaa | 33840 |
| aggagagagt | ggaaaggtag | gatattataa | ctaattgatc | aaatcattgt | taaaatttaa | 33900 |
| gtttattaat | acttttactt | ctgtccgtag | ggatccatgt | taaattgggt | atattataaa | 33960 |
| cttaactgct | aatgatgagg | tccttttgct | attagaaatc | tattttttat | ttttctttat | 34020 |
| tattttttga | ggcagggtct | tgctctgttg | cccaggctgg | agtgcagtg | tgaaattata | 34080 |
| gctcactgca | gcctcaacct | cctgggctca | aggaatcctc | ctgcctcagc | ctcccaagta | 34140 |
| atggaaaatg | cagtcgtata | caagcacacc | cagcaatttt | tttttttttt | tttggttaaga | 34200 |
| tggggtttag | ctatgctgtc | caagctgggc | tcaaaactct | ggcctcaagt | gacccctcca | 34260 |
| ccttanccctc | caaagtgtct | ggattacagg | cgggagccac | cattcccagc | ctagaatgaa | 34320 |
| atatcttttag | ctaaattaca | gggctggatg | tggtggctca | tgctgtaat | cccagcactt | 34380 |
| tgggagactg | agggcgggag | ggtcacttga | gatcaggagt | ttgagaccac | cctgggcaac | 34440 |
| acagtggaga | ttctgtctct | atlttaaaaa | gagaaaaatc | tagggtatat | tctcttaaac | 34500 |
| aaaactttca | ctataatgg | tagttgatga | ggctctatgt | aatatgcatt | tccttggttg | 34560 |
| caatagcaaa | ttactacaca | cacagaaagg | aaagccacac | tccccgacac | atctacacac | 34620 |
| aggaggactc | acacaggagg | gagactcaaa | gaaggcacgt | gacttttaca | ttgttagggc | 34680 |
| ttacatggtc | ctgggatttc | ccaccagtac | tcaaaagatc | aattgtatga | acaagtcacc | 34740 |
| tattttttacg | gcactaaata | attattattc | aacaacatgg | aaaatatgtg | gtagcagacc | 34800 |
| tggtattttcc | tttaagagtta | tttttatgtg | gtactgcccc | ctgctggaat | ataacatcta | 34860 |
| tacacatcct | ttctggctgg | gctgacatcc | taaaaccagc | ccaggaccag | ccttttatta | 34920 |
| atattaattc | ttggccaggc | gcggtggctc | gcctgtaatc | ccagtacttt | gggagtccag | 34980 |
| ggcgggcgga | tcacgaggtc | aggagttcaa | gaccagcctg | gccaacatgg | tgaaactccg | 35040 |
| gctctactaa | aaatacaaaa | cttagctggg | catagtggca | cattcctgta | atcccagtta | 35100 |
| ctcgagaggc | tgaggcagga | gaattgcctg | aaccgggacc | cgggaggtgg | aggttgcggt | 35160 |
| gagccgaaat | cgtgccactg | cactccagcc | tggtgtacag | agcgagactc | cgtctcaaaa | 35220 |
| ataaataaat | aaaaattaaa | attaaaaaat | aattcttggt | tgtatgctaa | aagccttgca | 35280 |
| agtagcccca | ctggaagata | ggaagagtg | ggctgtttta | caaatgagca | catataagca | 35340 |
| gaacgaggcc | gccataattg | aaatgaaggt | ccccgtcccg | tggatgtgtt | catcgctact | 35400 |

| | | | | | | |
|-------------|-------------|-------------|-------------|-------------|-------------|-------|
| tcaccctgtc | attcggatcc | aatgtgtgac | cagccagctc | caataacagt | tccatactct | 35460 |
| gggaattatt | tttaacactc | ggcaggatgc | tttcttccctg | tagtttttagg | cttagccctt | 35520 |
| tgtgcacttt | tggtctcttt | ccctttcaat | ttagcatcca | aggaagcggc | tgtgacccaa | 35580 |
| ggtagctgtc | atgttaaagg | acaaagttca | tagttacagc | aaatattgac | ccagagcact | 35640 |
| atccttgccc | cttccctctat | aatgtgcaat | gcaaaaatat | gttcttttaa | gtacaatatt | 35700 |
| aataagtaag | gtctaggaga | ttttcttccc | ccttcccttc | tcttttagat | gagtaaatgt | 35760 |
| tttatctagt | tttgaggaga | ctatccttct | tatcacatct | ctttccactt | ctgctctcct | 35820 |
| tgttttataa | ttttccctctc | ctttgggtcc | gtgtcattat | ttcgtgtcgc | ttgttttcga | 35880 |
| gccatgcact | catttatcaa | atcagatttc | ctccgtatgc | cgacggcctt | cctctccctg | 35940 |
| ccacgggctt | cctttttccc | tgactatgca | gaagcaattt | gttcgcttgt | gtttcttttt | 36000 |
| ttttttgaga | cagagtctcg | ctctgtcacc | caggctggag | tgcagtggcg | acatctcggc | 36060 |
| tcaactgcaac | ctccgcctgt | caggttcaag | caattctcat | gcgtcagcct | ccagagtagc | 36120 |
| tgggattaca | ggtgtttgcc | accaaggctg | gctaattttt | agtagagacg | gggtttcacc | 36180 |
| atgttgGCCA | ggcttgtctc | gaactcccaa | catcagttga | tccacccatc | tcggccttcc | 36240 |
| aaaatgctgg | gattataggg | atgaaccacc | gcactctggcc | ttgtctttca | tccttaatga | 36300 |
| cacttttagtc | ctaataatgc | taaaatcatt | ttctactctt | tgaattgaaa | cacagcttat | 36360 |
| ctacatgagc | ccaaggcagt | agcaacattc | acctccattt | cttctctgat | ctctaccttc | 36420 |
| tgaaccctgt | ggacttggtt | gtaaatggat | gagggcaagt | cttgcttcct | tcccctgtgt | 36480 |
| ttacagagga | tcgtggctga | gatgctgggc | cacactctgg | gcctgctggc | acccctgggc | 36540 |
| cgggtggctgc | tgccctcag | ggtgctcacc | acctagacca | gaagaaccaa | ggtgagggag | 36600 |
| agcctgtttt | ctttcttccct | gtggctgcgg | gggctgtgag | gcattgggtct | agtggctgtg | 36660 |
| tttagctggg | gatgcctcct | agaaatcagc | tccaccgttg | aagagatcaa | agcaatgcac | 36720 |
| agtGCCactt | gaaatgaaac | gattgagctt | atcagcgctt | ttgcaaatgt | acaagagggt | 36780 |
| agctcccccg | gacatccctga | actgagccat | gctcttctat | tttgtgtaac | agcccagtga | 36840 |
| cccctgaatc | ttcccctgag | gcaggctccc | gaagcttcat | ggaggatggt | cctcagctga | 36900 |
| ccaagggtgag | gctcttgagc | tcctaaatct | tttgtgatact | gtttatacat | cttttgtgctg | 36960 |
| tacttttttaa | gctgacttcg | tgttatcacc | tgtatgattt | tatgttttgc | ttctaaataa | 37020 |
| gtacagatta | ttttaaactc | taataatggg | tgtacaaaa | ttaaagatta | tgtcaatcac | 37080 |
| tgtctctgat | gagttatttt | atgtagattt | caacacaatc | attgattcat | gtgtactctt | 37140 |
| ggtcagtcac | cagtcactctg | agtacctagt | gggtttccaa | aatgggtcct | ggatgctggg | 37200 |
| gatgcaaaga | taagcaacac | atttctatcc | tcaacagcct | gtagatgagg | gagaatcact | 37260 |
| gcggacaatc | agggaaagtt | ccggagagag | cagtgacacat | gtggtctaga | aactgggtgga | 37320 |
| acaaagttga | gaatcactga | actaggagga | aagacaggtc | actgacaatc | caaggcacag | 37380 |
| tgactcacac | tctaactctca | gcactttggg | aggccaaggc | aggaagatcc | actgagctca | 37440 |
| ggagataaaag | accagcctgg | ctgacctatg | gagacccttc | tctacccaaa | aaaaaaaaaa | 37500 |
| aaaaaaaaaac | attagcctgg | catggtgggg | tgtgcctgtg | gtaccagcta | ttcaggaggc | 37560 |
| tgaagtggga | ggatcgcttg | agcccgggag | gtcaagactg | cagtgaatca | tgatcacacc | 37620 |
| attgcactcc | agcctagggg | agagagcaag | aaagaccctg | tctcaaaaac | agaaaaaaat | 37680 |
| ccagtaaaaat | gtttcagatg | ttgttaaagg | tgatttccact | gttacttttc | acctctcctc | 37740 |
| attttacatc | ctgacctat | gcttgtcctc | tgacttgcca | gacattccta | gctatggact | 37800 |
| tgatgtctcg | acatggaggc | tcacaggcac | cccaactca | gcctgcccta | agctgaaccc | 37860 |
| atgatctttc | cttccaaact | tgtttctcac | cagagtctcc | atcttatcat | ccacctagtt | 37920 |
| gttcaagtca | tccttaagac | ctccctctcc | ttcactgtct | attctacctc | cctaatatct | 37980 |
| cttaaatcct | tccctcctct | cccacctcac | agccaccatc | ctaacctaa | cagccaccct | 38040 |
| ttctcaccct | ataatgacct | cctggctggt | ctctatagag | ttgggtgaatc | ctttcgtctt | 38100 |
| cagcctgaac | cccctttcga | gggattctta | tatatataca | tagatataca | caaatatata | 38160 |
| tgtacatatg | tacatatgtg | tgtatatatg | tacatatgtg | tatggatata | catatgtaca | 38220 |
| tatgtggatg | tacatatgta | catgtgtatg | gggtgtacata | tgtacatgtg | tatgggtgta | 38280 |
| catatgtaca | tatgtgtatg | gggtgtacata | tgtacatatg | tatatgggtg | tacatatgta | 38340 |
| catgtgtgta | tggtgtgaca | tatgtacatg | tgtgtatggg | tgtacatatg | tacatgtgtg | 38400 |
| tatatatgta | catgtgtgta | tgtacgcacg | tacatatgtg | catgtatgtg | catgtgtatg | 38460 |
| tgtgtgtatg | tacacgtgtg | catatgtgtg | tatatgtgtg | cacgtgtacg | tgtgtatata | 38520 |
| tatatatata | tatactggct | ggagtgcagt | gggaaagttt | tggtcacca | caaactccac | 38580 |
| ctcccagggt | caagtgatcc | tcctgcctca | gtctcctgag | tagctgggat | tacaggcgtg | 38640 |
| caccaccatg | cccagctaat | ttttgtattt | ttagtagaga | cggggtttca | ccatgttggc | 38700 |

| | | | | | | |
|-------------|-------------|-------------|-------------|-------------|-------------|-------|
| caggctgggc | ttgaactcct | gacctcaggt | gatccaccca | cctcggcctc | ccaaagtgct | 38760 |
| gggattacag | gcgtgagcca | ccgtgcctgg | ccggattcct | atcttgaaga | cgaagcccca | 38820 |
| gaccatcgac | acggcctcaa | ggccttgcat | gacgcctcct | gccccaacac | ctcgtgtcat | 38880 |
| cttgctctcc | tctcccgag | ctcctgaggg | tttagccacc | ctggaattcc | aagtcccat | 38940 |
| ggtcattttt | ttttcctgct | caagatatca | ccatgtgctg | tccccctctgc | ccttgtctac | 39000 |
| accacgtgt | ccttctcccg | ccccggccac | actcatgggg | cacactgtcc | ttccctgggt | 39060 |
| aatcctccca | cactcgatac | cactttctct | gggatattgc | acccgatcct | cagccgcagt | 39120 |
| tgtcttccca | tgaccactc | ccacactctc | gccacaatgg | taattgtttg | attcctactt | 39180 |
| gttgctcctg | tgagactgca | aaccccagag | gacaggggccc | ctgggttctc | cttcgcctct | 39240 |
| ggatcatcag | cactaactga | atacctggcc | tagaagagat | gctaacgatg | ctgaatgaat | 39300 |
| aaataagtgg | aaagactctc | agtaaagcaa | aacctttctt | taccatttta | tggccgtcaa | 39360 |
| ggaggaāaac | acattatcag | tggaaaacgc | aaaatgaggg | gatttgctta | gcaaacgatg | 39420 |
| aattcctctg | gcaccctggc | agccttggtt | tcttttgatg | aggteccacc | ccttccatcc | 39480 |
| atcttctggg | cttaagagat | caaagcaaaa | catgctgtgg | aattcgatac | tgggtgcaggt | 39540 |
| tgcacaacat | tgtgactgaa | ctaaaagcca | ctggatggta | caactgaaaa | tgggtgaattg | 39600 |
| cgtgttgcat | gaattataac | ctaactgggg | aaaaaaaggc | ttaaaaagag | acaaagcttc | 39660 |
| cccacaaatg | gaaaggaagg | tataatagaa | acagcagctt | tcaaaccttg | gcaggataat | 39720 |
| gaaaccccg | ttctattttt | aaaaatttagc | tgggtacagt | ggcacgtgcc | tgtagaccca | 39780 |
| gctactcggg | aggctgaggg | tgggaagatcg | cttgagccca | ggagtccaag | gctgtggtaa | 39840 |
| actataatca | cactactgca | ctccagcctg | ggtgacagag | aaagaccctg | tctcaaaaaa | 39900 |
| ggaaggaag | aaggaaggaa | ggaaggaagg | agggagggag | ggaggggaag | aggggaaggaa | 39960 |
| ggaaggaagg | aaggaaatag | cagctctgag | cttagaaata | ggagtctatt | tctaagtggg | 40020 |
| agatggggag | aaggagggaa | ctggggaggt | gaggaagaag | caggtattgt | caccagtgg | 40080 |
| gactgtgctg | ttgtgagccc | agctaggcaa | ctggcaattc | cattctgtta | gtgacagcta | 40140 |
| caataaccca | aagccctctg | gagccctgct | ttcctctgct | ctcttcgtgg | cttgactagg | 40200 |
| agctgaagat | cctgtccctc | ttagagcatt | ggggcggccc | acccacctc | caccctcctc | 40260 |
| cacctgctgc | ctcgaggccc | ctccactcc | cggggtagac | aaaacagttt | agaggctgaa | 40320 |
| gtcaccgggg | ctgtaactgt | tggatttgca | catgtcatag | aaaatcatca | tatgttttgt | 40380 |
| gtggactcca | tgcataacaa | caagagaacc | aaccagaccc | catagacaga | agggagtgtg | 40440 |
| aattggagac | aaaattttaa | ttatgagttg | ccttctattc | agatttctcc | catttttaac | 40500 |
| aaaaaggagc | ccaaattcct | aaatgttatg | gttgtttgca | gcaacttate | atctttctcc | 40560 |
| tttccttcat | agccaaggtt | tttgaaagag | ctatctgagg | ccgggaatgg | tgactcacgc | 40620 |
| ctgtaatcct | agcacagagg | ctgaggtgag | tggatcacct | gaggtcagga | gttcaagacc | 40680 |
| accctggcca | acatggcgaa | atcccgctc | tactaaaaat | acaaaaatta | gccgggcatg | 40740 |
| gtggcgtgtg | cctgtaattc | cagctactca | ggaggtgag | gcaggagaat | cacttgaacc | 40800 |
| caggaggtgg | aggttgacgt | gagccaagat | ctcaccactg | cactccagcc | tgggcaacag | 40860 |
| agtgagactc | catctaaaac | aaaaaaaaaa | gtagctgtct | gttctttctt | ctcgaaactct | 40920 |
| ttttcccgct | ggagtctgtg | acctgctgcc | gtctgcctca | agtgagaggg | actagcagat | 40980 |
| ctgggtgaatt | accttctaatt | gcccgtacc | tgcccatacc | agcttcaatc | tgtatgtaga | 41040 |
| agcttagctt | gctccatgca | tggcctccag | catccactgg | tcacaaaata | acacaaaata | 41100 |
| gcatgagaga | gaatggctgc | atggagcgga | ggagctgctg | agactgaacc | caagccaggg | 41160 |
| ctactgctgg | gtggaactgg | acatgcccag | cccatgggaa | agtcttccca | cagaagtcac | 41220 |
| atttgcaggg | gtctcccagg | agacagcaca | ttctgagcaa | aggagtgagg | cagagataac | 41280 |
| tattcaggaa | ccaagagact | cgctggaaa | aagcagagat | tttcagccca | gcgtagtggg | 41340 |
| tgtttcttga | atcttccctt | gtggatggcc | caaaccttga | gatccttcca | acaaatagca | 41400 |
| cactactaac | aaactgtgac | tcaaagagag | ggaaacatgg | tccccctgctc | tgtcacaaat | 41460 |
| cactgtgaag | ctttggcacc | ctgactgctc | aggtggccac | caacacagaa | ggaccacgaa | 41520 |
| tggctgagtc | aggaagtcac | agccgtgtgg | ctggaagagg | ctctgccttg | ctctgggaga | 41580 |
| aatgcctatc | cccaaggaag | ccttagtatc | catgggagag | aaacactgta | gcaatggccc | 41640 |
| ccaggactct | cgggaagcca | cttctgggtg | gaggggactc | aaaggggtgct | gggggacctg | 41700 |
| tgtctgcac | tgggaagtgg | gagccaggaa | aattttcttt | cagtttcttt | cttttttctt | 41760 |
| ttcttttttt | tttttttttt | ttgagaaagg | gccttgccct | gtcgctcagg | ctgaaacata | 41820 |
| gtgggtgcgat | ctcggtcac | tgcaacctcc | acctcccagg | ttcgagtgat | tctcctgcct | 41880 |
| cagcctcccg | agtagctggg | actacaggca | tgcaccccca | cccacgccc | gctaattttt | 41940 |
| gtatttttgg | tagagatgtg | gtttcgccat | gttggccagg | ctggtctcga | actcctggcc | 42000 |

| | | | | | | |
|-------------|-------------|------------|-------------|------------|-------------|-------|
| tcaagtgatc | ctccccgatgt | gctgggatta | caggtgtgag | ccaccacgcc | cggcctcttt | 42060 |
| ctgcttcatt | taacattaat | ggtcatccca | cagcatgggtg | ctgtgcacct | gtagtcccg | 42120 |
| ctactcaggt | ggctgaggtg | ggagaatcac | ttgcgttcca | gctgtagtga | gccttgattg | 42180 |
| tgtctgtgaa | taaatgccac | ttctctccag | cttgagcaac | atagggagac | tgtctcttaa | 42240 |
| aaaacaaaac | aaaacaggct | gggctcggtg | gcccacgcct | acaatcccag | cactttggga | 42300 |
| ggccaaggca | agaggattgc | ttgagcccag | gaggtcaaga | gcagcctggg | caaaataggg | 42360 |
| agaccccatc | tctacaaaaa | gataaaaaat | aaaaaaatta | actgggcatg | gtgatacacc | 42420 |
| tgtagtccca | gctactctgg | aggctgagat | aggagtattg | cttgagcctg | ggaggctcgag | 42480 |
| gctgcagcga | gccatgatca | tgccactaca | ctccagtcca | ggcagcagag | tgagatcccc | 42540 |
| cctcaaaaaa | ataaaacaaa | acaaaactca | tctctccctt | ggctcctgag | actacaatcc | 42600 |
| ctcacgggtt | ttttctactt | ctctgttttt | ctcttcttgt | ctcccttttt | ttctgggtct | 42660 |
| tctgtcaccc | aggctggagt | gcagtgggtg | gatcatagct | cactgcaacc | ttgacctcct | 42720 |
| gggttcaaga | gacccctcca | cctcagcctc | tcgagttagct | aggactacag | gctcacacca | 42780 |
| ccatgcctag | ctaataattt | tagattttgt | agagatgggg | tcttgctatg | ctgtccaggc | 42840 |
| tgggtctcaag | ctcctggcct | caagtgatcc | accacacct | gccacccaaa | gttctgggat | 42900 |
| tacaggggtg | agccaccgcg | cccagccgat | aattgttgaa | aaatcatttt | cagttaaggt | 42960 |
| atccagtcga | ggtcagaaaa | tgagaaaatg | ttaaaaaaaa | aaaagctata | agtaaaacag | 43020 |
| attcagtcgg | gacatgatgg | ttcacgcctg | caatcccagc | actttgggag | gttgaggtag | 43080 |
| gataatcact | tgagcccagg | agttcgagac | cagcctgggc | aacatagcga | gaccttatcc | 43140 |
| atacaaaaaa | atttaaaaaa | tacccaggca | tgggtggcata | ctcctgcatt | ccctgctaata | 43200 |
| tggatgggtg | aaggggagga | tcccttgaaa | taggagtaga | ggtgcaggaa | atatgattgt | 43260 |
| gccgtgtaat | ccagcttggg | tgacagagca | agatgttccc | cacccccctg | aaaaaaaaaa | 43320 |
| aaaaaacctaa | atccaaattt | taaaagtttc | cttgactctt | caacttgctc | acctccacc | 43380 |
| aaataaaata | actacgaagg | aggcttattt | tttactattt | ccagggatac | gatatagtt | 43440 |
| tgtcctgaaa | atatacatca | tggctttact | caagccacag | tgatgaggcc | tcattgtcac | 43500 |
| tgtagcctaa | ttacgatttt | ataactccat | ttaaaattca | atttaaacac | agtttaaaaa | 43560 |
| ttcagtccaa | gtcaaacatg | ctctcagtag | ctagaagcaa | aactctgttc | aggctccttga | 43620 |
| tggatctatt | tgtactttct | ttcatgaaaa | cagaaagtcc | ttttttacac | accatgcaac | 43680 |
| aggaaaattc | ataacggaca | ttgttttacc | tgttcttggc | aaagacaagt | gagctcttaa | 43740 |
| caagcaaggt | aactatggag | atgatgtttt | gtcccaagtt | aacacttaca | tatttaatta | 43800 |
| gaaagatttc | aaaggtgggc | agattcactg | gaaagtttcc | aaaagcttca | cttgttcaac | 43860 |
| aaataatgtt | agagagggag | cacogtgccc | tcggggccct | aggaattagt | tcacatgggt | 43920 |
| ccggtcctct | gtccagtgtg | cccagcatcc | acttgggaga | acagcatggc | cttctgtcca | 43980 |
| gggcagccca | cgccagcact | gcttgccctt | tcaggcccat | ggctcccat | aagtgccatt | 44040 |
| tcgagcatac | ttagccaagt | ttccctacca | tggccaacaa | agaggttggt | caaaaatgct | 44100 |
| tgtcaggtcg | ggcatggtgg | ctcacgcctg | tagtcccggc | actttgggag | gctgaggcgg | 44160 |
| gtggatcacc | tgaggtcagg | aattcaagac | cagcctggcc | gacatggtga | aaccccgctc | 44220 |
| ccacaaaaat | acaaacatta | gttgggcatg | atggcggtg | cctgtaatcc | cagctgctca | 44280 |
| ggaggtcgag | acaggagaat | tgcttgaacc | cgggaggtga | agggtgcact | gagctgagat | 44340 |
| cagaccattg | cactccagcc | tgggcgacag | agtgagaatc | catctcgaaa | aaaaaaaaag | 44400 |
| tttgtcaacg | gtttcactga | atccagaata | ctttctaaa | atgtcaacc | tatagaatac | 44460 |
| attttataaa | attatgaagg | cctggtctgg | tgtagtggct | cacgcttgta | atcccagcac | 44520 |
| tttgggcagc | caaggcaggt | ggatcgcttg | aggctgggag | tttgagacta | gcctggccaa | 44580 |
| caaggcaaaa | ccctgactct | actaaaaaat | acaaaaatta | actgggcgtg | gtggtgcaca | 44640 |
| cctgtaatcc | cagctactca | ggaggttgag | acaggagaat | cacttgaacc | caggaggtgg | 44700 |
| agggtgcagt | gagtggagat | tgcgccattg | cactctagcc | tgggtgacag | agcaagactc | 44760 |
| tatcttcaaa | aaatagataa | ataaataaaa | attaaaacaa | aataaaattc | tgaaggcctt | 44820 |
| aggctcagaga | attaccgagg | gaatattcaa | agttatacct | ccaagtatct | acaatgaaga | 44880 |
| tactttcatc | agaaaaaagg | agtttacggc | caggccctgt | ggttcatgcc | tataatctca | 44940 |
| gcactttggg | aagccaaggc | tgaggcagga | ggatcacttg | aggccaggag | ttcgagacca | 45000 |
| gcctgagcaa | aaacgtgaga | tcccatttct | acaaaaaata | aaaatgtaag | gtaggcatgc | 45060 |
| aactgtagtc | ccagctactc | gagaggtgga | ggcaagagga | tcgcttaaac | ccaggactcc | 45120 |
| agcctgagca | acagagcgag | accctgttta | taaaaaaaaa | agaaaaaaaa | aaagaagaag | 45180 |
| aagaaggaga | agaaaggaaa | taaaatttaa | gaaaaaaaaa | aggacttaat | aaggttgaat | 45240 |
| gaaggcaaga | atattcttag | ctctgtttta | gtcaagacct | gagtagtagc | tctacgtage | 45300 |

| | | | | | | |
|-------------|-------------|-------------|-------------|------------|-------------|-------|
| tgtatgtcga | taatgttttt | gagacagcac | tactgataaa | ttgttacata | ataaactggt | 45360 |
| atggctggat | gcagtggctc | atgcccataa | tcccagcacc | ttgggaggcc | gaagtgagtg | 45420 |
| gatcacctga | ggtcaggagt | tcgagactag | cctgatcaat | atggtgaaat | cccatttcta | 45480 |
| ctaaaaaaat | aaaaattagc | tgggcatggg | ggcgcacctg | taatcccagc | tactcaggag | 45540 |
| gctggggcag | gaggattgct | tgaacccagg | agacagaggt | tgcagtgagc | cgagattgcg | 45600 |
| ccattgcact | ccagcctaga | agacagagcg | agactccatc | tcaaataaat | aaactgttaa | 45660 |
| attaagttta | gcctaaagct | acccctttac | atatttttaag | ttcagtctaa | aggtttccct | 45720 |
| gcacatagtg | aactgtaacc | taactggatg | cgtaaacaga | ctataaccta | ctcttggggc | 45780 |
| agtcactgag | ttttgggtcaa | tcaaaggcag | ccaactgttc | aaaccagggt | aaaataaggc | 45840 |
| agatgctgag | ctctaaccag | tccagccatt | tctgtacctt | gcttccattt | tctgtccatc | 45900 |
| actttccctt | ttctgtccat | aaatcttcca | ccacgtggct | gtgctggagc | cactgtgaaa | 45960 |
| ctattctgtt | tcaggggctg | cccaattcat | gaatcattcc | ttgctcaatt | aaactctggt | 46020 |
| catttaattt | gtctaataat | tttcttttaa | tcaaagtaat | ttggccgggc | acagtggctc | 46080 |
| acgcctgtaa | tcccaacact | tcgggaggcc | gaggtaggtg | gatcacctga | ggtcaagggg | 46140 |
| tcaagactag | cctggccaac | atggtgaaac | cccgctctcta | ctaaaagtac | aaaaattagc | 46200 |
| cgggtgtggg | ggcgggcgcc | tgtaatccca | gctactcggg | aggctgaggg | aggagaatcg | 46260 |
| cttgaacccg | ggaggtggaa | gttgcagtga | gctgagattg | tgccattgca | ctccagcttg | 46320 |
| ggcgacaggg | caagactctg | tctcaaaaaa | aaaaaaaaaa | ttaattcaga | gacctactca | 46380 |
| tgtgaagttg | tattttttta | ttctccatat | tacaaaacag | aacaattggc | acagggatga | 46440 |
| agaaatactt | tgcaaaacat | ctagagaggt | taaattgcat | gagtctttta | aatgtaagac | 46500 |
| tgctttcacc | tgagcaatct | agtgtccatt | tctagagcta | gcttaaatgt | ccgtgtaaat | 46560 |
| ccccgtaatt | ggttgggata | acaattacct | atgttgtata | acttgagtca | aaaactacgt | 46620 |
| ttccactgcc | tgccaccctt | atggatgggt | ttctcttaag | gtatcaaatt | ttactgggaa | 46680 |
| agacctagat | aaaatacagc | gaaaatgagg | cggggcgctc | tggcacatgc | ctgtaatccc | 46740 |
| agcgctttgg | gaggctgagt | cagaaagatc | tttgaattca | ggagttcaag | accagcctgg | 46800 |
| gcaatatagt | gaaatcctgt | ctttacaaaa | aattaaaaat | tagccaggca | tgggggcatg | 46860 |
| ggcctgtagt | cccagctact | tgggttgggt | gactgatgtg | ggaggatcac | ttgagcccag | 46920 |
| gaggttgagg | ctgcagtgag | ctctgaccat | gcccctgcac | tccagcctgg | gtgacagagc | 46980 |
| aagacccagt | ctcaaaaaga | aaagaaaaag | agtaatgtta | ggtcaaggta | gaacctacct | 47040 |
| tgactttctg | ttactatgga | agatattctg | gggtatctct | gagatccaag | tattatggca | 47100 |
| cttaagtaat | tctatctat | tgttctactt | ggttcctcgg | gagtaaaagt | catattcaaa | 47160 |
| ccaaaaaggc | tgtgggattt | ccagaatttt | aaaagcaata | atagttaatg | ttctcccatg | 47220 |
| ggagttactc | cacattttta | catatgttcc | atatgttaac | tcatttagac | cttaccttta | 47280 |
| tgaggtaagt | cctcttctta | tccccacttt | agaggtggga | aaactgaggc | acagaaagag | 47340 |
| taagttgctt | gcctaaggcc | ctgttactag | caggtgggtga | aaccagcatt | ccaacccggg | 47400 |
| agtctggcaa | atgtgtgtga | agagcacacg | tttggaaatg | acagtcatga | ggacactgta | 47460 |
| agacttctgg | aatgtttata | atttcacctt | tgcttgttat | ttttcctgtc | tgtttcccta | 47520 |
| gagtgagctg | agtgaaaaaa | gaaagaagaa | agaaagaaga | aagagaaaga | gaaagaagg | 47580 |
| agagaaaaag | aaaaaagaaa | agaaaaacag | aaaaagggaa | agaaagaaga | aatgaaagaa | 47640 |
| agaaaagaaa | agaagaagaa | aaagaaagag | agaaagggaag | gaagggaagg | gggaggggag | 47700 |
| gaaaggaaga | agaaagaaag | aagggggaca | gaggggaggga | atgaaggagg | gagagaggga | 47760 |
| gggaaggagg | aagaaataaa | aagatgagga | tctgtatgct | tgaggggtgg | agggtggggg | 47820 |
| cttgggtggg | agtgtgggat | gggcagaaaag | ctggaggggag | ccctggaccg | actgcattcc | 47880 |
| acagaggatt | gtgggtgcaa | cgtaggtggc | agattgagaa | aagcaaacaa | acaagctcag | 47940 |
| cctttggagc | ttcggggaag | aaaaaaagct | gagcagtga | tgctggcttc | ccacggagaa | 48000 |
| ggcaggctgc | ttcgccagct | cacatccttc | cgcgcaccca | cttctctctt | ccggagggtca | 48060 |
| cttttagattg | ctttatggca | ggatctccag | gtcacaggaa | tgttatgttt | cgactggggg | 48120 |
| ttccccctcc | cctgggatgc | ctgggccagc | tccccagggg | ctagtctctg | tcccaggccc | 48180 |
| cacactccca | tagcactcag | caaaagccta | gagagagcac | cgcaaaatgc | caaacgcaac | 48240 |
| aggaccgcgt | aggaagaaga | cgcttgggaat | gacagggaca | ctagaactgc | ccatggctcg | 48300 |
| ggtctcaaat | ttttgttcca | tggtctgaaa | tactaaaagt | tcttaaacag | ctacttgatt | 48360 |
| tcatactatt | gttttgaaga | aaacagtgtt | tgtttgttgt | tttgttttgt | tgtttgtttg | 48420 |
| agacagagtt | ttgctcttgt | tgccgagttt | gggccatgtt | ggtcaggctg | gtctcgaact | 48480 |
| cctgacatca | ggtaatccac | ccacctctgc | ctcccaaagt | gctgggatta | caggaaaaca | 48540 |
| gttgtttctt | taaaacaatt | atataggctg | ggcacggtag | ctcatgcctg | taatcccagc | 48600 |

| | | | | | | |
|-------------|-------------|-------------|-------------|------------|-------------|-------|
| actttgggag | gctgaggtgg | gtgaattacc | tgaggtcagc | agttcgagac | cagcctggcc | 48660 |
| aacatggtga | acctccgtct | ctactaaaaa | tgcaaaaaat | tagccgggcg | tggtggtgca | 48720 |
| ttcctgtaat | accaggtact | caggaggtcg | aggcaggaga | atcacttgaa | cccaggaggt | 48780 |
| ggaggttgca | gtgagctgag | atggcaccac | tgactccag | cctgggcaac | aagagcaaaa | 48840 |
| ctccatctca | caatctcaaa | aaaataaaaat | aaaataaaaat | aaaataaatg | gttatataag | 48900 |
| ctaccttatt | gatgcagtta | caaatgagcc | gctgaaacat | ataaatttta | aagaacaagc | 48960 |
| cacatatctt | tcatcaccca | cagcttcacc | aactaaaggt | gtatgtagta | cttttgtgga | 49020 |
| aggcatttcc | acatgctttg | agggaccttg | aaatactgct | atgattacat | gatttttcta | 49080 |
| aaaccagact | actcctacat | tacaagaatt | gaaaagttca | gagtaaatat | ttgtaagacc | 49140 |
| tagaaaagat | gatgttcttt | aaaaaaaaacg | atgcccatct | ttgtagcgaa | aagaaagaga | 49200 |
| gatcagactg | ttactgtgtc | tatgtagaaa | cagaagacat | aagagactcc | attttgaaaa | 49260 |
| agacctgtac | tttaaacaaat | tgctttgctg | agatgttggt | aatttgtagc | tttgccccag | 49320 |
| ccactttgac | ccaactactt | tgacccaacc | tgagctcac | aaaaatatat | gttgtatgaa | 49380 |
| atcaaggttt | aagggatcta | gggctgtgca | ggacgtgcct | tgtaacaaa | atgtttgcaa | 49440 |
| gcagtatact | tggtaaaagt | catcgccatt | ctctagtctc | aataaaccag | gggcacaagg | 49500 |
| cactgtggaa | agccgcaggg | acctctgccc | tggaagcg | ggtgtgtgcc | aaggtttctc | 49560 |
| cccatgtggt | agtctgaaat | atggcctcgt | gggatgagaa | agacctgacc | atccccccagc | 49620 |
| ccaacacctg | taaaggtct | gtgccgaggt | ggattagtca | aagaggaaag | cctcttgtag | 49680 |
| ttgagataga | ggaaggccac | tgtctcctgc | ctgcccctgg | gaactgaatg | tcttggtata | 49740 |
| aaacccgatt | gtacatttgt | tcaattctga | gataggagaa | aaaccgccct | atggcgggag | 49800 |
| gcgagacatg | tttgagcaa | tgctgccttg | ttattcttta | ctccaccgag | atgtttgggt | 49860 |
| ggagagaaac | ataaatctgg | cttacgtgca | cgtccagtca | tagtaacttc | ccttgaactt | 49920 |
| aattatgacg | tagattctgt | tgtccacatg | ttcgttgctg | accttctcct | tattatcacc | 49980 |
| ctgctctcct | actacattcc | tttttgctga | aataacgaag | ataataatca | ataaaaactg | 50040 |
| agggaactca | gagatggtgc | cgggtgcaggt | ccttggtatg | ctgagcgccg | gttccctggg | 50100 |
| cccatgtttg | tttctctata | ctttgtctct | gtgttttatt | tattttctca | gtctctcgtc | 50160 |
| ccacctgact | agaaatatcc | acaggtgtgg | aggggcaggg | caccccttca | catcttgtct | 50220 |
| ccacttcctt | gattaaaaaa | aagaaaagaa | aaaaaaat | gccgaagttg | gattcattca | 50280 |
| cagaattcta | cacattaaaa | atgttgcagg | tcgggtgtgg | tggcagctcc | caaagctgcc | 50340 |
| tataatccca | gcgctttggg | aggcttgagc | ccaggaggtc | aaggctgcag | tgaactgaga | 50400 |
| tcgcaccact | gcactccagc | ctgggcgaca | gagcaagacc | ctgtctcaaa | gaaaaaaaaa | 50460 |
| aaaacagaaa | aaaataacgt | tacagaaaaa | gtacaatatt | tttaatatat | atatatatat | 50520 |
| tttttttttc | tgagacagag | tgttgctctg | tcaccagggc | cggagagcta | tggtctgatc | 50580 |
| tcagctcact | gcaacctcca | cctcccgggt | tcaagcgatt | ctcctgcctc | agcctcccgga | 50640 |
| gtagctggga | ttacaggcac | ccaccaccac | gcctggctaa | tttttgtatt | tttagtagag | 50700 |
| acgggggtttc | cccatgtttg | ccaggtggc | ctcgaactcc | tgactttatg | atccgcctgc | 50760 |
| cttggcctcc | caaagtgttg | ggattacagg | tgtgagccac | catgccagc | caaaagtaca | 50820 |
| atatttttaa | tgacatataa | agatgttcat | tctttgtggt | tgccctgggt | gagagggact | 50880 |
| attgatactc | aatagtgttt | cttttgtttc | tacattgttt | ctatagttaa | aatacgcatt | 50940 |
| ggctttgtat | taaaaaatgt | atagtaaaaa | tggttttatt | aaaaatagca | aataactaca | 51000 |
| aaaactccat | tgcaatggaa | agcagccctt | ggattttcta | gttgaatgaa | acgagtaatt | 51060 |
| tatccaatgt | tagaaatgtc | taaaggctcg | ctcaggtttc | atgagcagaa | caggaattgt | 51120 |
| atatccaatt | aaatgtgaaa | ttgcaatgcc | tggtgcggtg | gcttatgcct | gtaatcccag | 51180 |
| cactttggga | agccgaggca | ggggatcgct | tgagcccagg | agttcgagac | caccatgggt | 51240 |
| aacatgggga | ggccccatct | ctacaaaaaa | taaaaatcgt | tagccgggca | ggttggtgca | 51300 |
| tgcttgtgtt | cccagctact | tgggaggtcg | agggtgaagg | atcctctgag | cccaggagga | 51360 |
| tgaggctgca | gtgagacatg | atcgatgcac | tccagcctgg | atgacagagt | gagaccctgt | 51420 |
| ctcaaaaaaa | aaaaaaaaaga | aaagaaagta | caatcgcaat | taaatgtctt | tgcgttgggtg | 51480 |
| gctcctgacc | aaattcccta | agcaagcagt | atgttaatga | gcagaggggc | cacagctcac | 51540 |
| cttgctcaat | taaaggcagg | agcaggccgg | gcgtgggtggc | tcacgcctgt | aatcccagca | 51600 |
| ctttgggagg | ccaaggtggg | cggatcacga | ggtcaagaga | tcgagaccat | cctggccaac | 51660 |
| atggtgaaac | cctgtctgta | ctaaaaatac | gaaaattaac | tgggcatgtg | gcatgagcct | 51720 |
| gtaatcccag | ctactcggga | ggctgaggca | gaagaattgc | ttgaaccggg | gaggtggagg | 51780 |
| ttgcagttag | ccgagattgc | accactgccc | tccagcctgg | tgacagagcg | agacttcatc | 51840 |
| ttaaaaaaaa | aaaaaaaaaaa | ggcaggagca | agtatggggc | agacagaaat | caaggtgtaa | 51900 |

| | | | | | | |
|------------|-------------|-------------|-------------|-------------|-------------|-------|
| attgggcaga | tcctcaggcc | cagtgcgtgaa | ttttggtttg | atgaaataaa | acattacatt | 51960 |
| tcaaggttgg | cagagaggaa | tgaaggtgga | agaggaatct | agggccattt | aggggaagcca | 52020 |
| tgaagcctcc | tgcccacact | agtgggtaga | gtggagccag | gcgttttgct | agggcttgct | 52080 |
| atatctcttg | gcagggtgct | ctgctgccaa | agccaagaat | tctaaattag | attaaatagc | 52140 |
| cagaaagaat | gttaaacatt | tggacatgat | atcctccctc | acagattagc | tagagtgtag | 52200 |
| ttctgctgtg | ctagatactt | aaataaatac | ctccctagct | gtgaagcctg | cttatcacag | 52260 |
| tactatattt | taggatgagg | tcattatatt | cctatgcata | cacatgcatt | gtataatctt | 52320 |
| gccaatgtag | gtcagcccaa | aagaagtgac | aaatgtgtag | aacacacatt | ggactagctt | 52380 |
| gggacaaaa | tagtatacct | aaagatgaca | gatttcttaa | ctaattttat | gagccatgca | 52440 |
| gctttgtatt | ctagcagaga | cagacattag | gaatcttata | aaatcaaaaa | ttttaatttt | 52500 |
| tgctgaata | gctccaaagg | gctaagatct | caagcaaattg | cgtgtagggt | ttgtttttgt | 52560 |
| ggttggtgtt | gttttttagag | acagggtctt | gctctgtcac | ccatgctgaa | gtgcagcggg | 52620 |
| gcagtcctag | ctcactgcag | ccttgacctc | tcaggcttaa | gtgatectcc | tgcccttagcc | 52680 |
| tcccagtagt | ctgggactac | aggcgcatgc | caccaccccg | agtaattttt | tattttttatt | 52740 |
| tttacttttg | tagagacagg | ggtctcaata | tgttgctcag | gctagtatct | tttttctttt | 52800 |
| tgagacagtc | tcgctcaatt | gcccaggctg | gagtgcagtg | gtgccatctc | ggctcactgc | 52860 |
| aagctccgcc | tcccgggttc | acgccattct | cctgcctcag | cctcccaggt | agctgggact | 52920 |
| acaggcgccc | gccaccatgc | ccagctaatt | ttttttgtat | tttttagtaga | gacgggggtt | 52980 |
| caccgtgtta | gccaggatgg | tctcgatctt | ctgacctcgt | gatccacccg | cctcagcctc | 53040 |
| ccaaagtgtc | gagattacag | gcgtgagccc | tcgcgcccgg | cccagtcctt | taacttaact | 53100 |
| ttaaagctac | ttattcccaa | atgaagatgg | gatggtacac | agatttttaag | tatttagctgg | 53160 |
| tttgagctt | ctgtctttta | aagcaacatt | ttactttgce | acagggtggg | ggggcggggg | 53220 |
| ccatccatga | aagaagagt | tgagtttcat | gggatagggt | ctggggagggt | ggctggagga | 53280 |
| gtttaggttc | ttttgatatc | tgtggctaca | cagacagata | accaaggaaa | atgtccaaac | 53340 |
| agtgaattta | agtgctcact | gcactaacac | agagaaggac | cctgatgtct | ggccgcaggc | 53400 |
| ctttgttctc | attggcttca | aagaacttct | tgatgtctac | cttaatttca | ttattattta | 53460 |
| cccaggagtc | attcaggagc | aggttggttca | attgccatgt | agttatgtgg | ttttgagtga | 53520 |
| gtttcttaat | actgagttct | aatttgattg | tgtgtgggtc | tgagacactg | tttcgatttc | 53580 |
| agttcttttg | catttgctga | ggaatgtttc | atttccaatt | atgtggtcga | tttttagagta | 53640 |
| agtgccacgt | gacgttgaga | agaatacata | ttctgttgat | ttcggggggg | agagttctgt | 53700 |
| agatatctat | taggtccact | tgatccagag | ctgagctcaa | gtccttgaata | tccttattca | 53760 |
| ttttctgtct | cgtaaatctg | tctaataattg | acagtggggg | attcaagtct | cccactatta | 53820 |
| ttgtgtggaa | gtttaagtct | ctgtgtagggt | ctctaaaaac | ttgttttatg | aatctgggtg | 53880 |
| ctcctgtatt | gggtgcatat | gtatttagga | gagttagctc | ttcttgttga | attgctccct | 53940 |
| ttaccattat | gtaatgcccc | tctttgtctt | ttttgatctt | tgttgggata | aaattacatt | 54000 |
| ttatgtcccc | cttcctatag | tttgtcactg | agggttggca | gaagttgaaa | ggaagaagac | 54060 |
| atttgggtgt | ttggtttggg | gttatattag | gttataagggt | tcattgcctc | cacctctttc | 54120 |
| aaaacattta | gtttctaaat | gaatccagct | ttaaatgact | gcaggagtgc | ccatgcacaa | 54180 |
| ttttgtttct | caaatctttg | ggatttttcc | ttgaagaata | ttcacaggga | atggggctgt | 54240 |
| cttgcttcat | agttactctt | ttgtatacat | gatctcaaga | atcgctgat | cactgctaga | 54300 |
| gttaaaccaa | tacactaact | gcctgaagt | gtgaaaagtc | aaatgggggc | ttagaacctc | 54360 |
| actccagatc | ctacacaagc | tgatggttct | gttcccagaa | acaaccagc | ttcctcatca | 54420 |
| tctatggcca | gtgccttgta | gcggagctgg | agatcaccct | ttagtgggct | cttcagctgg | 54480 |
| atctagaaat | caaattgaca | ccaggcagat | taacaagaga | aaagtataca | gatttttattg | 54540 |
| cttttatatg | tacttgggaa | tctgcacaag | ggcaaagtcc | gaagaggtgg | ccaaagcaag | 54600 |
| gtgcttttat | acattttttg | aaaaagagcc | aaaaaattgg | agaagaaatg | ataggacaaa | 54660 |
| gaaaatctag | ccaggcagta | aattttctag | gagaatcact | aggacatata | tgaggaaggg | 54720 |
| tgtgtaaaac | aggtgaaaga | taagggttag | ttcattaaac | atgtttactc | tggtccattg | 54780 |
| tagcctctac | gataaggagt | attttctcgc | tctggtgtgg | acagggcacg | cctcccagag | 54840 |
| caacctttat | cacttactgc | atgcaggaag | agacaggtca | gcccgcctt | cctgaaacta | 54900 |
| caatttcttc | agtgttttca | actcaaaata | atcaataccc | cccatctggc | atatctgggg | 54960 |
| atggcacgtc | ctttactcct | tcaggctctt | ctccctgaag | gtcctttgca | tagttgggaa | 55020 |
| tctccaccag | gaggggtagc | tctttgggtc | aaacccatgg | tggcagagtt | tcgacaatat | 55080 |
| tcccaactta | aatgtttctg | attctgagtg | gtggttagat | ccctttgtac | accctgtcc | 55140 |
| ccagtgccta | cagaatgggc | atgttaataa | gtgttggctg | aacattcaat | gatggataag | 55200 |

| | | | | | | |
|-------------|-------------|-------------|-------------|-------------|-------------|-------|
| gaagaatagg | aggcaagaga | gacggtggtc | tccagtgcca | agccccagtg | ctaactgggg | 55260 |
| tgattttttt | tcatgactca | ttttcctaaa | atcaccctca | agggtcctac | aaaactcttc | 55320 |
| ccaacagcta | aatcacagac | taatctggcc | catcgacgtc | ttccctgatt | atactaattt | 55380 |
| ttttgtgttt | ttttttttga | gatggagtct | tgctctgtca | cccaggttgg | agtgcaatgg | 55440 |
| cactatctca | gctcacagca | acttccacct | cctgggttca | agcgattctc | ctgcctcagc | 55500 |
| ctcctgagta | gctgggactg | ccagcatgcg | ccaccatgcc | cggctaattt | tttttttttt | 55560 |
| tttttttagta | gagatgagat | ggggtttcac | catggtggcc | agggtggtct | tgaactcctg | 55620 |
| accgcaagtg | atccgcttgc | ctcgccctcc | caaagtgctg | ggattacagg | tgtgagccac | 55680 |
| tgcgcccagc | catatattaa | tggtttttga | tgaatttggt | ccatagatta | aaatcttgtg | 55740 |
| ccccatcgcg | tgtggggctc | catcgcatgt | ggggcacagg | gttccctgagt | gtttgtggct | 55800 |
| gtcaaaccac | gatgatttct | tgcttaatca | agcagatttg | aaagtccatc | tctgctacca | 55860 |
| ggaagcactt | gctcaactca | gaagacaatg | tcctatcagt | ctttcactat | cacgcactctg | 55920 |
| ttcttcaaga | tcctgcaaat | tagctccagt | gaaacggagg | ctaaagtga | actttttctc | 55980 |
| ttatatagat | ttttattcat | aactagggaa | aaattaggca | cccacagaaa | aataataacc | 56040 |
| taaaaaaatt | aggctgaacg | taagaaaaat | ttgtgatgaa | ataaacattt | caatcaacag | 56100 |
| aaaatatattt | tctgactttt | tatgtgccac | catttagttac | atcattgaga | aaacaatatt | 56160 |
| tgtattaaaa | aaagagctgg | tgaaaatctg | gcaattgggt | gggcatagtg | gctcgtgcct | 56220 |
| gtaatcccag | cactttggaa | ggccgaggca | ggcggatcac | ttgaggtcag | gagtttgagg | 56280 |
| ccagcctgac | ccacgtgggt | caacccccct | tcaactaaaa | atacaaaaat | tagctgggag | 56340 |
| tggtggcagg | cgcatgtaat | cccagctact | agggaggtta | aggcaggaga | attgcttgaa | 56400 |
| tctgggagat | agaggttgca | gtgagccgag | actgagccac | tgccctccag | cctgggtgaca | 56460 |
| gagcaagact | tcactctctc | ctcttttact | ttttttaaag | acttcttctc | aaaaataaaa | 56520 |
| agaaagaaag | aaaatctggc | aatccagtaa | aaactggcca | ctatggcatg | catgtgctat | 56580 |
| gcataaacgt | aaattgatgc | ataaacctaa | ttttagaact | ggaaggaaat | ctggagttct | 56640 |
| ttaggagcca | ggtttttacac | atgcagaaac | ctaacagctt | cagtttcgat | tcgataaaaat | 56700 |
| ttgactaact | aaacttaaga | taagcatagt | tacgcattag | agtattaaact | ctcaaacttt | 56760 |
| taaaaaagaa | ttcttctctt | gcttggttaat | tttctttctt | tctttttttt | ttttttgaga | 56820 |
| tagggctctg | ctgtcgtcca | ggccgaagtg | cagtgcgttc | atcatagttc | actgcagcct | 56880 |
| ctacctcccc | ggctcaagta | atcctcctgc | ctcagccttc | tgagtatctg | ggactacagg | 56940 |
| catgagccac | catgccccagc | cttttctttt | cttttctttc | ttttctttct | ctctctgtct | 57000 |
| ctctttcttt | cttttttctt | ccctttcttc | tttttttttg | atggagtctt | gcactatcgc | 57060 |
| caggctggaa | tgcaagtggg | cgatcttggc | tcactgcaac | ctccgcctcc | gggttcaagc | 57120 |
| aattctcctg | cctcagcctc | ctgagtagct | gagactacag | gtgtgtgcca | ccacgccagc | 57180 |
| taattttttt | atttttctag | agacgggggt | ttaccatggt | ggccaggatg | gtcttgatct | 57240 |
| cctgacctca | ttctccacct | gcctaggcct | cccgaagtgc | tgggattaca | ggcatgagcc | 57300 |
| accgtacctg | gccctttctt | tctttttatc | aagacaacaa | catgtcttta | tagtgcctcc | 57360 |
| aaggctaaag | tataccttac | gtctatgtaa | acactcaacc | tgagctttgc | aatggcccat | 57420 |
| gttggcagta | gtgcaaacaa | aaacaattat | gaaacccatt | ttcctttgac | aaagagaaat | 57480 |
| aagtggcaag | aattgggtct | ttctcttagt | atgggtctct | gaaaagaacc | agatcagtca | 57540 |
| aaaggggaat | atttttctga | agggatagg | ttggcctagt | ggcttctacc | tcttttagat | 57600 |
| gactgctgtt | tctcgtttta | atgttaata | gacactaata | ggagaaatca | cattaattca | 57660 |
| gtcaacaaac | atttactgag | cacttccctgt | agtcaggccc | tctgttaact | tctgggaata | 57720 |
| caatgacaac | tctgacaatc | ccaacccaag | gagccaacaa | gtccgggaat | agagacagac | 57780 |
| aagaaaacag | acaattacaa | ctctaccgtt | agaataaagg | tacattgaga | acttgcaaca | 57840 |
| aatattcttc | atcccttata | tttaattatc | ataacatggt | taccaccaat | agaatagca | 57900 |
| ataacaataa | atgcccactc | cagacagcaa | tgtccattta | ccctgtgttt | acacagcata | 57960 |
| atacaagcaa | gctgtggaca | gagattctct | tgtttagtcc | tcacaactct | gcaaggtggg | 58020 |
| ttttattact | ctccatttct | agataaagga | tctcacctaa | tattacatgg | gccagtgggtc | 58080 |
| ttccagttgg | ggtatgcaca | accctagggg | taggtgagga | ccctgcctgg | ggtcttcagg | 58140 |
| tggggaccat | caacctccat | ttgtactctt | ttctgaacat | tgggtctgaga | cagaaagtcc | 58200 |
| ctgcaattaa | ggcatthaagc | tggctctttt | tctatttctc | atttcataat | tgcccttctc | 58260 |
| ctgctttacc | aaaatctttc | accccccatc | atatatatat | atccccatac | atattctata | 58320 |
| tatacatacc | ctacatatgc | atgcacacac | atcatatata | tgtatgcata | tatgatatat | 58380 |
| acatatatgc | tatgtaaaca | tatatagtgt | gtatatacat | gtgtgtatgt | gtatatgtgt | 58440 |
| gtatatgtgt | atatatacac | gtgtgtgtgt | acatatatac | atcatatatg | tgtgtctata | 58500 |

| | | | | | | |
|-------------|-------------|------------|-------------|------------|-------------|-------|
| tatgtatata | tgggtgtgtc | tatatatgtg | tatatgtacg | caaatacgt | tatgtgatgt | 58560 |
| atatatataa | gatgtgtgtg | tgtatatata | tgtgtttgca | tgtgtgtgtg | tatatatata | 58620 |
| tagtatatac | atattttttg | agacagcatc | tactctgtc | gcccaggctg | aagttcgggtg | 58680 |
| gctgatgaca | gctcactgca | cctcccggct | caagtgatcc | ttccacctca | gcttccctgaa | 58740 |
| tggctgggac | tagaggcgtg | tgtcaccaca | cccagttagt | tattttattt | ttcgtagaga | 58800 |
| tgggtggtctc | actgtattgc | ccaggctggg | ctcgaactcc | tgggctcaag | cgcttttcca | 58860 |
| cctcgacttc | ccaaattgct | gggattacag | gtgtgagcca | ctgcaccggc | ccatccttta | 58920 |
| ttttaatatt | atgcagtgcc | ctgagacata | taaaaaaccc | accttcccaa | gtaaaggaaa | 58980 |
| ttcaagctga | tgccctgcaga | gccttcttta | acaaaggctc | tgaaataccc | tctctcatta | 59040 |
| aaatgatact | ttccaataaa | attttgttta | acaatgattt | acaaaatgat | aaaattttatt | 59100 |
| tatttttgatt | gtgtatggat | catggtaaca | ataaaaagac | ttgtaaaaat | aactaaattg | 59160 |
| aaagaatctt | gaacatttag | agccttaaga | ctgtaggaat | tgaagaccac | agaattatta | 59220 |
| atztatatta | atattttttg | tgcagagaca | taatgaatga | tcaacgaaag | gcttttaagc | 59280 |
| gttaaaaaata | tattacacta | gataaaatta | tttgcgggaa | tgggatggaa | atacattttc | 59340 |
| aagagagaaa | ggagcaatgt | aaaatgaaga | tgtaaaatcc | ttctgctggg | tgtccttggg | 59400 |
| gttttctttt | aaagaaaagc | ttggcagtg | ttttcttttt | ttccattgga | tgatggtgaa | 59460 |
| tatcaaatca | ctttggtgct | aatatttcat | ttaatacatt | aatttttaaa | ttttctgtag | 59520 |
| aggtgggac | tactatggt | gtccaggctg | gtttcaaact | cctggcctca | agcaatctcc | 59580 |
| ctgcctcagc | ctcccacagt | gctgggatta | cagggtgtgag | ccactgcac | cgccccatt | 59640 |
| taatacattt | aaaagagtgg | tgtacaatt | tttattttaa | atgtcatatt | tacaatatcc | 59700 |
| tagaatgtat | atcttttcaa | ctcattaaac | ctaaacatcc | ttgtaaaaag | tgtgaaaagt | 59760 |
| tatatagttt | ttcaaaattc | gattagcagt | tacataagca | taaatgttta | aagtatgtat | 59820 |
| ggtacagcca | ggcttcagtt | ccctgtctta | aacacaaaag | tccatatcaa | ttccagatac | 59880 |
| tgcaatgggt | tgtgtttttt | cctgctttcc | ccatctccaa | ataaactaaa | gcatacaat | 59940 |
| gcctcacctc | acataaccct | aagttttcag | cagttggcag | ttacacctgg | aaacctttt | 60000 |
| tctaaaataa | acaacaactg | tttgcttacg | gatcaaaatg | caaaggacca | taacatttag | 60060 |
| cctcaccttc | ctactacaga | tgcagtttaa | aagtgccatg | gtatagctaa | attatgaaga | 60120 |
| aagatatgaa | tataactgca | aaagtggaa | gagatttggg | ataattcttg | cccattttgt | 60180 |
| taggccaaat | gcactcttgt | gcaaattaga | aaaagggtgg | cttcacccct | tactcctat | 60240 |
| ccttttgggg | gtggaggggc | agtggctaaa | gtacagacta | ggtttcagct | accacatcct | 60300 |
| ccttcagtta | gctgccctcg | gcgtgacaga | aacatgtgca | aacagccctg | tgctttgtc | 60360 |
| ttatgttcca | gccagccaag | aaaaatagtt | gtaaaagagc | agctgctgtt | tggggtaatg | 60420 |
| accttggacc | ctccccaatt | tgttccaagc | ctgtttttgt | attcattttt | cccacattta | 60480 |
| tgttcctgga | tggaaacttc | catatctgct | cttggcccta | tttgaaattc | cccagatttc | 60540 |
| cttccctggc | cctggccttt | ggtttttcat | gtggctcctg | atcccacacg | ctccctgaat | 60600 |
| ttggattctc | ctgtcatttc | aggtgcgagg | tttcccacta | cagcctcttg | ggcctcacct | 60660 |
| ccaatacctc | tttcccatca | gaacagcccg | gaccttcccc | tatggtagag | cagagacaga | 60720 |
| attttaaaga | attctcaaga | agtgccttga | ctcatatcta | gcaaaattac | atggcattta | 60780 |
| acctttgaca | caaaaaatgc | agcttctagg | aatctatcta | aagatacact | gtggcaaata | 60840 |
| tacaaaaaga | agcattattt | atcaagcact | atttccctaat | aaaataattc | ttaggtcagg | 60900 |
| cgcaatggct | caggcctgta | atcccagcac | cctgggaggc | tgagggaagg | agatggcttg | 60960 |
| agctctggag | ttcaggacca | gcgtgggtaa | catgacaaaa | ccccatctct | aacaaaaata | 61020 |
| caaaaattag | ccgggcattg | tggcatgcac | ctgtagtccc | agctactcga | gaggctgagg | 61080 |
| tgggaggatc | gcttgagcct | gggaggcaca | ggttgcagtg | agccaagatc | gcaccactgc | 61140 |
| actccagcct | gggtgacaga | gtgagaacct | gtcaaagaaa | gagagagaga | gagagaaaag | 61200 |
| aaagaaagga | agaaaggaag | aaagagaaa | gaaagagaaa | gaaagagaaa | aagaaagaaa | 61260 |
| gaaggaaaga | aagaaagaaa | aaagaaagaa | aaagaaagag | aaaggagaaa | aagaattctt | 61320 |
| actaataaat | gcaggagaaa | tgatagaatt | gaaatatcac | cattttcaat | tcctaataag | 61380 |
| ataacgtatc | taggcaatga | ccatcaatag | ctagatgcta | aaatcatctg | atcaaacact | 61440 |
| gatgggaact | tcgtaacaga | tggatcaggc | taacaacatc | tgaaaccact | aactggtttt | 61500 |
| gatgtcataa | aaagaaaaac | aaccagatat | tttctgtctc | ctgatgagtt | gcaattggag | 61560 |
| ctacatatca | cctgtaaagt | cttctggcca | aaaaattaag | cccagccgga | ccttattaaa | 61620 |
| cctttaaatc | taacaattag | ttttgaagct | tttacagatt | aaatgaagtc | tgagattttg | 61680 |
| ttcaaaatga | accagtgggt | gggaggaagt | gggtgaggtg | taggtgaaac | aagattggcc | 61740 |
| acgtcgataa | ttgctggagc | tgggcgatga | aagcacaggt | atttatcaca | ccatctctct | 61800 |

| | | | | | | |
|-------------|-------------|-------------|-------------|-------------|-------------|-------|
| acttttgtgt | gtttttttgt | ttgttttttg | ttttggtttt | aaggagcaga | gagtctaata | 61860 |
| ggcaagaaag | aaaagagaag | gctgaaggaa | gacgctcccc | cgtacagaga | cagagggagg | 61920 |
| gggctccaaa | gccgaaagag | gaggtcctct | tgtgtatggt | ttaaaatact | cccagataaa | 61980 |
| atatttttgg | aagagtactt | ggttggattc | aacagctttt | ttttaattta | aaaaaatcac | 62040 |
| ctcaattttt | ttgcttgctc | taacgtgcca | tagaaattcc | tgaggtttta | cttgttgctt | 62100 |
| tacaatgaac | tgtgtaaaca | caagctggaa | gagatcagct | atgcgctgga | agggttgggt | 62160 |
| aaatattgag | actgccttgc | tgaggggaagc | cttttaatga | atctcagtaa | ttttgcaaga | 62220 |
| gaaaagataa | caatgaacac | tacattaaac | atcattcttt | tgcactttgc | taaatatgtg | 62280 |
| tatgtaaatt | actgtctgac | tgttactgga | tatatacagc | atatacatat | gcactttttt | 62340 |
| tactgttttt | tttttttttt | tttttttttt | tttttttaca | gagcttgctc | tgtcacctag | 62400 |
| gctggagggc | agtggcgcag | tctcagctca | ctgcaatctc | cgctcccag | gttcaagcga | 62460 |
| ttctcctgtc | tcagcctcca | aagtagctgg | gactacaggc | gcctgccacc | gctcctggct | 62520 |
| aattttttgta | tttttagtag | agacaggggt | tactatgtt | gtccaggctg | gtctcgaact | 62580 |
| cctgacctcg | tgatccatct | gcctcggcct | cccaaagtgc | tgggattaca | ggcataagcc | 62640 |
| accgcgccc | gcccatgtat | actatttata | catttttagt | atcattttgt | ctttacattt | 62700 |
| tacataattt | cagatacatt | ttcctcatat | caaataattc | agcatttttt | agtactaaca | 62760 |
| tcatagtctg | taagccattc | aaaaaatgta | tttcacaaaa | taggctatct | catcctttga | 62820 |
| gctattgaga | tgaattaatt | tatactcctc | ctaagatccc | tctcgtcact | aagattcttt | 62880 |
| tattttatga | caaaaccata | gttctagaag | cttgtttctc | ccacctgaaa | agactggatt | 62940 |
| tgggacatga | tctgtagaa | cttcggaggt | aagcctgggtg | aatcagatca | taggggggtct | 63000 |
| ggaggggtgaa | aaaaaaggg | ttggtgctca | tggatggggc | tagtattggg | gtgtagggga | 63060 |
| gattaggtca | aagcaagagg | attcaaagga | gaaatgaatt | ccttttagatt | ggggaagata | 63120 |
| atcgggaagag | gtaaaagaca | ccgtccatga | cacttccttg | ggaagcagat | gtatgtataa | 63180 |
| ggatgtgagt | attgtggttt | tgtaaagaat | gcattcctga | agatgttgca | taatttaaaa | 63240 |
| cctacataatt | ttgattaatt | ttctcatgag | aatagcagg | tatgtgttct | cggcgctcac | 63300 |
| aaatgtataa | tccattgtgg | caaatttttg | ctttcacata | ttttttttta | tcattattgt | 63360 |
| cacaggttct | gtgacggagt | tctggtttct | aaattcacag | cataccaagg | cagttcttta | 63420 |
| aagttcttga | tactctttta | tcatatctaa | cttgtattcc | aaaattattg | agttggagca | 63480 |
| cattttccca | gcacttagca | ccgtattttc | atggatgggt | ggagaggggg | tccaaaaatt | 63540 |
| ttacaattat | gttaacaaaa | gtaacacagc | aacaaaacaa | taagcaaaat | cactgccaga | 63600 |
| gtattcctta | gcttgaaaca | atacggttca | catcgataga | atatggcatc | tatttctggt | 63660 |
| taatcagtta | accctgctaa | gtagcaagag | cttacaattc | atgtctaaaa | tcattgattt | 63720 |
| tttactagtt | ttttaaaaaa | tgtgggctct | atatatataa | tttaacattt | tgcttgtaag | 63780 |
| acttaatttt | gcctgggtat | ggtggctcat | gcctgtaatc | ctagcacttc | agtgaggttga | 63840 |
| ggcaggagga | ctgcttgaac | ccaggagttc | aagaccagcc | tgggcaacac | agtgggaccc | 63900 |
| catcactacc | aaaaaaaaaa | aaaattagtc | aggcatgggtg | gtgtgcactt | gtagtcccag | 63960 |
| ctacttggga | ggctgagggtg | ggaggatcac | ttgagcccag | gaggtcactg | ctgcagttag | 64020 |
| ccattattgt | accacaacac | tccagcctgg | gtaatagagt | gagactctgt | ctcaaaaaaa | 64080 |
| aaaaaagact | atttctaaat | gtgtggctat | attataccat | ataaatgtgg | cttcttgggc | 64140 |
| aaggaaaagag | gacaatatag | atgaaaaaga | aattgatcct | accagaagtg | atccttttat | 64200 |
| ctgcataact | ctcaggcagt | tgtggcaaat | aattggcaat | atctattggt | ctgaaactgg | 64260 |
| ttttcgcaac | ttttattggg | aacaccatcc | cctctcctgc | atgatcagtt | tctcctctcc | 64320 |
| acggatcatt | cacatgagta | aagtcagtag | cgtgctggta | aatgtttaag | atcttgttct | 64380 |
| ttgggggaaa | aagttcctaa | gttctagcag | ttgccctgga | taacttcaag | gtatcaacat | 64440 |
| ggaagttatg | tacaaaaatg | gctgtcacia | gccagtatga | gctaacacca | acatactacc | 64500 |
| cagtgttctt | caaacttcag | ctcacagccc | attagtgggg | cttgcaaaaa | ttttagtggg | 64560 |
| ctataagcag | cattttttta | aaatgaaaaa | gtagattggt | ttacacataa | caggagtatt | 64620 |
| gttttgtaca | attttttttt | tttttttttt | tttttagaca | cagtttctact | ctgttgccca | 64680 |
| ggctggagta | cagtgggtaca | atctcagctc | actgcaacct | cggccttctg | ggttcaagcg | 64740 |
| attctcatgc | ctcagcctcc | cgagttagctg | aaattacagg | catgcgccac | aaggcccagc | 64800 |
| taattattgt | atttttagta | gaaacaggg | ttcaccat | tggccaggct | ggtctcaaac | 64860 |
| tcctgacctc | aagtgatcca | cctgcctcgg | cttcccaaa | tgctgggatt | acaggagtga | 64920 |
| gccaacgtgc | ctggtcaaaa | tttttgtttt | cgtaatttta | agtatgtgtg | tagtaagtct | 64980 |
| caatggaaat | gtaattctta | tggcaggtca | cttgaaaaaa | aagaagtcta | aaagtcacca | 65040 |
| atgtagtatc | ttctctttta | aaaaaaaaaa | aaacaacagg | agaaaacctg | aatctgcctt | 65100 |

| | | | | | | |
|-------------|-------------|-------------|------------|-------------|-------------|-------|
| ttgctccact | ccttcctcag | ctataatget | gcttctccat | tcctcctcac | agcaaacctt | 65160 |
| tctgaaatct | ttatagtcac | ggtttccacc | agttcttcac | ctcccatttc | tcaacacact | 65220 |
| tcagagtcag | agtcagcaat | gacatccatg | ttcctaagcc | cattgcttac | ttccgtcctc | 65280 |
| cttggcctct | cagcacactt | ggcacacagg | ctgtttctct | ttctttggca | tctgtgacac | 65340 |
| cactctcagc | aaattccccct | ggttgctccct | tctcagtctc | atttattggc | gttgtcttat | 65400 |
| ctccccaggg | ctgtccgagg | tgattttctc | ccactactct | cctaggtggg | gccatccaat | 65460 |
| ctcatgatgt | catatcatte | ttccctcatg | cttcagccat | actgggtggg | ggcctttggt | 65520 |
| tcctgaacac | atttaaatgca | ttctcaagac | cctcagggac | tttgagcag | ctgctcgcta | 65580 |
| aggctggaat | gctcttcccc | accatcttca | tatggtgtgt | tcctttcttt | cactcaccag | 65640 |
| cagcttaaac | tttgactcct | ctgagagact | ttccttgtea | cccaactaag | gttgccactc | 65700 |
| agggtgctccc | aatttaaatct | tctctaaaac | acatcactgt | atgtgtcctc | aactagagta | 65760 |
| taagcttcct | cgaacaaga | acaatcaaaa | ctccttgccc | tcattggagt | tatagtctta | 65820 |
| tgatgggtga | agtaacataa | aataaaaagg | caccttatat | agtatattag | catgacaaat | 65880 |
| gtaggacaga | aataaagcaa | ggaagagttg | ctagggagtg | tgtatgagtg | tgttttggga | 65940 |
| gagtgtttgc | aatttttaaat | attggtgggc | aggaagggcc | ccactgagaa | ctgacatttg | 66000 |
| agtagacttg | aaaagggaaa | aggaaatatt | gagtaaagat | tttaggatgg | gagtgtgaca | 66060 |
| ggcctgctag | gagaatagca | aagtcgctgt | ggctgctgca | gaaaaagtga | gaaggaaagt | 66120 |
| agtaggagat | gaaatcacag | tgtgtgagga | ttcgggcaga | tcaggaagtg | ctcgtgtaag | 66180 |
| aactggatct | ttactcaaag | aatgagcaaa | aattagtaga | cggttggccg | gatgcagtgg | 66240 |
| ctcacacctg | caatcccagg | ttacaggagg | ccgaggcggg | cggatcactt | gaggtcagga | 66300 |
| gttcaagact | agcctgggca | acatggtgaa | acctcatctc | tactaaaaat | acaaaactta | 66360 |
| gctgggcatg | gtggcgcgca | cctgtagtcc | cagctactca | ggaggctgag | gcacatgaat | 66420 |
| cacttgaaca | cggtaggcag | aggctgcagt | gagctgagaa | tgtaacactg | tactccactc | 66480 |
| caacctgggc | aacagagtga | gactgcctca | aaaaaaaaaa | aaaagtaggt | tttagtaagg | 66540 |
| gattaacatg | atctgaatta | tgttttgtca | tgacttctct | ggctgttgtg | ttgagactac | 66600 |
| attgcagagg | ggcaagggca | aatataggga | gaccgattag | gatactgcag | taataatgta | 66660 |
| agagatgtgg | gactctatct | agaagggcc | atgaggtcct | ttgcatgcta | gtattcttta | 66720 |
| ctgctgtgcc | tggccatgat | aggcattcag | tgaatatttg | cttattttaa | ataacacact | 66780 |
| gggctaattg | aacaacagtg | ccaaatgagg | gagatatttc | taggaataag | ttcttaggat | 66840 |
| ttatgaacat | tttaatccag | attttctttg | ttaaactctg | tctctggccc | tttcaactcag | 66900 |
| ccccgtttgc | acctaaatat | gacttacaaa | agaaacacag | catttatgtg | tacttatttc | 66960 |
| aacttacttt | agctttgtaa | agaagtacaa | ggttgactca | gggcccagct | tggtgtctca | 67020 |
| tgcctgtaat | ttcagcattg | tgggaggcca | aggcaggaag | atattgtgag | cccaggagtt | 67080 |
| tgagaccagc | ccgggcaaca | cagtggaccc | tgtctctaca | aaaaaaaaatt | tttaaatcag | 67140 |
| ctgggcatag | tgggtgtcgt | ctatagtccc | agctactcct | ggggctgagg | tgggaggatc | 67200 |
| acttgaggga | aaccctgtct | caaagtggcg | gggctggggg | gagactcagg | cagaattgtg | 67260 |
| aagatattca | attgctcctg | actttatcaa | taatctaaca | tttcaacctc | acattgatat | 67320 |
| ctattttatg | caaagcatta | cactatgcac | tggagactgt | ataagacaag | ttccttttct | 67380 |
| caaactacag | tcgagttgga | tagataaaac | acacaacaca | taccaaaga | cagctataaa | 67440 |
| tccaaggcag | tgtatgtcaa | gggtaaattc | acctattcag | attggatctt | gagaagtgca | 67500 |
| tcaggcttgg | aaaatgggta | aggaggagag | aaaagcaaca | gtgaatcaga | acatgagttc | 67560 |
| ccagttatgg | gacttghtaat | gaattcctca | attaaaacaa | aaaataatga | aaacaaaagc | 67620 |
| cagggaggag | aaagcccacg | ttaatgacac | taaaatatat | ctttccaaac | aaatgtggat | 67680 |
| aaaagccaag | tagagaagat | gagaactttg | aggtccttaa | cacaaaataa | acagtaagca | 67740 |
| gccagccatt | ccaagtggct | gacatgactt | tgttttaact | tatttgtatt | tctggctggg | 67800 |
| gtgtttacag | ccaataggtc | aaactatcag | tcagtgtagg | gccctgagaa | gtcgggtatt | 67860 |
| taagagcatc | taataggcac | agaatttgtc | tccatactgc | ttaaactgtt | ccctaagtgt | 67920 |
| ccaatttgga | gaaaacaccc | acacgcagga | taaccggcga | gtgacgcgga | gtggctgcga | 67980 |
| gtccaagtta | tcactaacgg | atggggagct | tgggctgggc | acagtccagc | gtactgaacc | 68040 |
| cttccccac | cgtttcacct | gcatacagag | gtgtgtactg | tcaaaaagca | gcgcctccaa | 68100 |
| gtctcttctg | gcactgtctg | gacttggatc | cgaggcagac | gaggaagctg | agaaaacctt | 68160 |
| ggcggttgacc | ccgtggacct | gggcgccccg | ggaaggccag | cgcttgggtc | aggcaggcgg | 68220 |
| ggcctgtgcg | gtgaccaccc | tggtcctgaa | aagtcaccag | cccagagccc | ctccctccta | 68280 |
| gacctggagg | cctggaacag | ccaggtggac | gtcggcccac | ctttcttttc | tttccctccc | 68340 |
| attttccctac | cacctccac | cccactccgc | cttccgggca | aaggcagcca | gatccaccca | 68400 |

| | | | | | | |
|-------------|-------------|-------------|-------------|-------------|-------------|-------|
| ggacacattc | tttgtcctta | tccctctgtg | ctcgtccca | agcaagccag | tcgcgggtcca | 68460 |
| aggctccaga | ggctgtgcag | gaggccgagc | tgggtggcga | tcagcggcg | gtccctgtcc | 68520 |
| aaaatccagc | agagccgcca | gggacgcccc | agacacagaa | ggcggggcgc | ggggaggggtg | 68580 |
| gggagaccac | agcagtgagg | cgcgcgagcc | gggaagtga | cgaggactga | ctcctgtcgc | 68640 |
| ttcccgtagc | cgcccacgga | cgccagagcc | gggaaccctg | acggcactta | gctgctgaca | 68700 |
| aacaacctgc | tccgtggagc | gcctgaaaca | ccagtctttg | ggtgagtcgc | gcgacccccg | 68760 |
| gcctcgggtg | gcggggcagc | cgctagaggc | gtggctgctc | tgagggtctc | gccagtggag | 68820 |
| gatggcattc | ggatgtcacg | gctcctaaat | caccatttga | tgggtgggac | agtgtccagt | 68880 |
| ccaccccgac | ccgcccgtcc | tcaccgcggc | agagccgggg | ctgggtggcg | gggacgctgc | 68940 |
| ctctgcaggc | gaggcgctcc | ggggcataag | ggattatcag | gagtcgcggc | ctttcttgga | 69000 |
| catccctggc | tggggtcagg | ctggttgccc | tggggtgtct | cctcgtgcga | aacccacccc | 69060 |
| acctgggctg | ctttctcacc | tgttccctcc | tagcctgagg | ccgagcgcca | cctccaagtg | 69120 |
| gaggaatctg | gggaagtttc | cttcccggaa | tttgtagtga | cagtggagtg | acctccattg | 69180 |
| cgttccctgc | ctctaaccag | ctcttttaga | tgccgagtca | tttgactgca | gtgttaaaca | 69240 |
| ttgcaaagcg | caagtcattg | gacttccttt | gaccgtacgt | gaaacttaag | tgatggctgc | 69300 |
| ttgtgatgca | tacgaagtgt | tcattgctggc | gggacctgtc | cctggggata | cttcgggggt | 69360 |
| tgcgtgattt | aatgcaagca | gatggcttaa | attgggtcac | tggcttggtt | ttatacatgt | 69420 |
| gtatggcaac | tcggcatcca | ttctttttgc | tcttggtctt | acttcctgaa | ttgagtcacg | 69480 |
| gagccagagt | tttgaggttt | tgactaacga | attaagttaa | tgacatgggg | ctatatattag | 69540 |
| gtggtaaacc | aagagggata | cagttttttt | tcttaataaa | gaaaaagtga | tagatttgat | 69600 |
| cgggtgtgat | tgttggtgtg | cagtataatg | acagaattgc | tggaaagtaa | atacaggaag | 69660 |
| ctctgggttc | atttcccttt | tagttctgtc | taaagtcgag | tttttctctg | agctattaaa | 69720 |
| tgtagtgtag | tgtccatgag | tgctttttatc | ttaaaaaatg | tggctgatgc | tttccaacac | 69780 |
| tcccctgccc | tgtgattatt | atttttttaa | gcaacagaga | aaactgtatc | ttaatagtat | 69840 |
| taaaagtatt | ggattttttc | ctactttgat | tgttttaaat | tggaggagga | agagcaattc | 69900 |
| tttctattca | caataataat | agctaacata | gcgcttactc | tttcgctggt | ttattaactc | 69960 |
| aatcctcaga | acaaaccaat | gatgtgaata | ctgtaattct | catttttatgg | aaatgaaaat | 70020 |
| ttaaatgaat | acctctgata | attgtacggg | actggttgat | tagtattttac | cattaattaa | 70080 |
| ttaaattttt | tttttttttg | agatggagtc | tcgttctggt | gcccaggctg | gagtgcagtg | 70140 |
| gcacaatctc | ggctcacttc | aacctccgtc | tcccagggtc | aagcaattgt | cctgtctcag | 70200 |
| cctcctgagt | agctgggact | acaggtgcat | gccactacgt | ctggctaatt | tttgtatttt | 70260 |
| tagtagggat | gggatttcac | catattggtc | aggctggtct | ccaactcctg | aacctcaggt | 70320 |
| gatccacccg | ccttggcctc | ccaaagtgtc | gggattacag | gtgtgagcca | ccatgcctgg | 70380 |
| cctatttttag | tattttttaat | aataaattcc | atgttagaaa | ttttctactg | atgtattttt | 70440 |
| taagtcaata | tttctacac | tcacaatcca | aaattattta | gtatatgagc | acactggtaa | 70500 |
| gaatgggagg | cagatcggtg | attgtaataa | tattctatta | tttggtaaat | atcagtaaca | 70560 |
| taatatataa | tttaaatttt | aaaataggat | atgaagaaaa | atgctacatg | cttacttttc | 70620 |
| ttttcctcta | tttttacttt | acacagggcc | agtgcctcag | tttcaatcca | ggtaaccttt | 70680 |
| aatgaaact | tgccataaat | cttaggtcat | acacagaaga | gactccaatc | gacaagaagc | 70740 |
| tggaaaagaa | tgatgttgtc | cttaaacac | ctacagaata | tcattctataa | cccggtaact | 70800 |
| gatttctata | agataacttt | ttacctatgc | caggacagat | ccaatagaat | attaattatc | 70860 |
| cattggggaga | cagggcaaga | ataaaagcca | gtgaacatat | ttaaagcacc | tactatgtaa | 70920 |
| tagagatggg | ggtgggtgct | gattacgaaa | cagctcttgt | cctctagtgg | aggaagaagt | 70980 |
| cacaatgata | atatgacgtg | atgaaacagt | gttatgaaca | gggaacgtct | gggtagagtg | 71040 |
| gagggaatgc | caactttttg | tgatgggagg | aggctcagct | aatcataaat | tgtagttttt | 71100 |
| aaaggaaaat | ggattttctta | ctctacaagt | ttttcatttt | cttttttaat | tagagctgtc | 71160 |
| catgagaagt | taatgtctcg | atctttccct | cagcctttca | aatactgctt | ggcccttgag | 71220 |
| cagggaaaat | gtcaaaagcc | aatggggaga | tggagagtgt | gaagtagtaa | gggtctcgtg | 71280 |
| cagttcaggc | aggtcctaga | atccctgaat | gactgttaatt | gctggaaatt | gccctgtaat | 71340 |
| cctgagcagt | aaagagcttg | ttttagtttt | atgtgggtgt | gagaatcttt | aggaatgtct | 71400 |
| agtttccacg | tatctgaagc | tgaatcctga | atcgagggtct | gaaaaaggac | agccactttt | 71460 |
| ttagtaaacc | gcctagaaga | ttcttgggca | aaaggaaggg | tgagaatcct | taaaatgagg | 71520 |
| ccctaaacca | gttttggttag | tgtgtgtggg | ttcaagtttt | tgtcattttac | tttatagctg | 71580 |
| tatttccctt | ttccctaagt | tttaatgtca | ttgtgtaaga | atgaggtatc | gctgctgtat | 71640 |
| caagcaaagt | cagtttttag | agaaatagcc | tttcagtggg | agtaagttta | aaaaagatga | 71700 |

| | | | | | | |
|------------|------------|------------|-------------|-------------|-------------|-------|
| cttcctgaag | cggaagcttg | tgagacattt | aagatgactt | tgcgcatggt | agagttaaaa | 71760 |
| acatcccaag | gttgtaaact | gatttcctgc | aaagatctta | acaacaacaa | caacaacaac | 71820 |
| aaactaggct | gcctgccacg | ggtgtctgaa | gtatcatctt | ggctcaagct | gggagaatgg | 71880 |
| ataaaggtta | cactgttcat | ttctgccctt | cacacagaaa | agaagataat | tttataggta | 71940 |
| aaattcgtgc | atatcttgat | tctagcatal | tgctgattcc | tgtagtctct | ggggtcagta | 72000 |
| ctctcaacta | ttgaggtgga | acaaaaataa | gtagacttca | tttcttgagg | aaggggatct | 72060 |
| ggagaagtag | ttctgcgcta | gagcagaaaa | tgcttcagat | cttgtggcat | gggctggatg | 72120 |
| ctgttctgag | gataatgcat | ttccaaggga | gatatttttg | gcaaatagct | tttttttctt | 72180 |
| tcttttcaaa | attctctgtt | ttattatcag | ttctcacaaa | agagtccgaa | aggtagaggg | 72240 |
| tagactgaac | tgaatggcaa | aaacattttg | cgctctcttt | acgtttcact | gctgtaaaat | 72300 |
| atztatagta | taaagggcct | gtattgcact | gaatttctct | catttgtagc | tagttgccct | 72360 |
| ttcaatgttc | caaaaaaaag | gctgtaaata | acttatttta | tttattcaat | taattttttt | 72420 |
| ttttaaattt | tttgagatat | agtttccctc | tggtcaccca | ggctggagtg | aatgatgca | 72480 |
| atctcggctt | actgcaattt | ctgcctcccg | ggttcaagca | attctagtgc | ctcagcctcc | 72540 |
| tgagtagctg | ggactgcagg | cacgtgctac | catgcccggc | taatttttgt | gttttttagta | 72600 |
| gatatggggg | ttcacagtgt | tggccagcct | agtctcaaac | tcctgacctc | aggatgatgtg | 72660 |
| cccaccttga | cctccaaaag | tgctgggatt | acaggcgtga | ggcaccatgc | ctggccaact | 72720 |
| tagttattta | aagataatca | attagtatat | tttataagct | agacttagga | aaactgtttt | 72780 |
| cagctgggca | tggtggctca | cacctgtaat | cccagcactt | tgggaggccg | aggcagggtg | 72840 |
| atcacgaggt | caggagttca | agaccagcct | ggccaagatg | gcgaaactcc | gtctctactt | 72900 |
| aaaaatacaa | aacttagcca | ggcgtgatgg | cagcctcctg | taatcccagc | tactcgggag | 72960 |
| gctgaggcaa | gagaatcact | tgaacctggg | aggcggaggt | tgcagtgagc | cgagatgggtg | 73020 |
| ccactgcact | ccagcctggg | tgacagagcg | agactccatc | tcaaaaaaaa | aaaaaccccc | 73080 |
| cccacacaca | aaacctgttt | tcttgaatca | tggtgttttt | gttactgata | ggttcaataa | 73140 |
| gtaaatatat | ttattgtctg | ttgtattctt | tattaggcat | tataaacaca | ccgccacttt | 73200 |
| tttaattttt | tttcattaat | gtttccaatt | tttttttttt | tttttttttt | tttaagacag | 73260 |
| aggctcgctc | tgtcatccag | gctggagtg | agtgggtgcag | tcttaccoca | ctgcaacctc | 73320 |
| cacctcctgg | gctcagcctt | gtaaatagct | gggactacag | gcatgcacca | ccatgcctgg | 73380 |
| ctaatttttg | tatttttttt | ggtaaagaca | gagttttgcc | atgtttctca | gtctgggtcaa | 73440 |
| gcactcctcc | cgctcgggcc | tcccaaagtg | ttgggattac | aggcatgagc | caccatgcct | 73500 |
| ggcctatttc | taatattttg | gtccacattg | gtgttagacc | aactgtccac | attaagtttt | 73560 |
| cttggaagag | atgaagtaaa | tattgcaact | ggcctatgta | tttttttccc | tatttagtat | 73620 |
| atctctttga | ctagttcaac | tgatagaatt | ccaagactta | aaaaagtcag | gctctaaggc | 73680 |
| tgggtccaga | ggctcatgcc | tgtaattcca | gcactgtggg | aggccaaggc | tagtggatca | 73740 |
| cttgagccca | ggagttcaag | accagcttga | gcaacatagt | gagaccttgt | ctctctataa | 73800 |
| aaatacaaaa | attaactggg | gattgtggcg | catgtctgta | gtcccagcta | tgaggaagag | 73860 |
| tgaggtggga | ggattgcttg | agcccaggag | gttgaggctg | cagtgagctg | tgagtttgac | 73920 |
| actgtgcttc | attctgggtg | acagagcaag | aaccatgttc | aaaaataaaa | ataaaaagtc | 73980 |
| agagtcgggg | tgctgcggct | catgcctgta | atcccagcac | tttggaagc | cgaggcgaga | 74040 |
| ggatcacttg | aggtcaggag | ttcgagacca | gcctgactaa | cacagtgaag | ccccgtctct | 74100 |
| actaaaata | caaaaattag | ccgggcattg | tggcgggtgg | ctgtaatccc | agctacatgg | 74160 |
| gaggttgagg | caggagaatc | acttgaaccc | gggaggtgga | ggttgtaatg | agccaagatt | 74220 |
| gcacaactgc | actgcactct | gggcgacaga | gtgatacttc | atctcaaaaa | aaaaaaaaaga | 74280 |
| aaaaaaaaag | taggcttctt | tttctgtttt | ttttttcttt | tttcttctct | tttttttttt | 74340 |
| ttttttaaga | gatggaggct | tgctctattg | cccatgctgg | agtgcagtgg | tgcaatctcg | 74400 |
| gctcactgcc | acctttgcct | cctgggttct | agcaattctc | ctgcctcagc | ctcccagagta | 74460 |
| gctgggacta | caggcgcaca | ccgccacgcc | ccgctaattg | ttcttttgta | tttttagtaga | 74520 |
| gacgggggtt | caccatgttg | gccagcctgg | tctcgaactc | ctgagctcag | gcaatccgcc | 74580 |
| cgctcgggcc | tcccaaagtg | ctaggattat | aggcgtgaac | caccgtggct | ggccacttac | 74640 |
| ttttctttct | attgaatttg | aatgaataat | ttggaagaca | gtatctttac | ttcataccag | 74700 |
| gaatgctgcc | agtgaatttt | cttggttggc | agttcattat | ctacctatat | atttaatttt | 74760 |
| gctattgttt | atagagttct | taagatatga | ttaaatgcta | gctgggttaag | aatcatttta | 74820 |
| gaaatgaaac | agaattgggt | gttactccaa | gttaataagt | tgcttgtaaa | cataaatcct | 74880 |
| acctggtacc | cagttttctt | aggaaccttg | cttccatgtt | tatccttttc | tgcttagtat | 74940 |
| tctaagtact | cctttttttt | cttacaattt | agtcttaaaa | cacaacacag | tcaagtcttt | 75000 |

| | | | | | | |
|-------------|-------------|-------------|-------------|-------------|-------------|-------|
| cttttgtaac | ctgtgaggtg | ccttctagcc | tttgtgctgt | ttttcttctt | tttttgcctg | 75060 |
| ctgccttcct | gactgagagt | ggatttctct | actaaggctc | tgccctctga | tttttcaact | 75120 |
| tctttgtctt | tttgggttta | ctagtgaat | tttgtcttta | atgtctcttt | cttttatgtc | 75180 |
| tttaccgata | actcataaat | ttttttttcc | atatgtatcc | agttccaacc | tttcacctaa | 75240 |
| tgtgaacccc | caactctcag | ttgctcagcc | agcccttcaa | gactaggagt | tcaaaaccaa | 75300 |
| acttgcattc | tccttcccaa | accagctttc | ctcttgagct | tttctgcagc | aggatccttc | 75360 |
| tgtgtgttaa | cttttgcctc | ctcccttggt | tcctagcacc | caatagttgg | aagatagtct | 75420 |
| gtcttcaaaa | ttttaaacta | catttatgtc | caaaccagtg | gcttttctct | ttaaaaaat | 75480 |
| ttaaagataa | tatgtgcaaa | tcattttttt | aaaattcaaa | cagtatttaa | gagtttcagt | 75540 |
| gaaacatgca | ttttccttct | accctgggtac | ttagttttac | tccccaaggg | caatcacttt | 75600 |
| ttactgggtt | ttagaaatat | atccttctct | agatacttat | gaatatccaa | aagtgtgtgt | 75660 |
| gttgtgtata | tcacctttta | tatatctctg | ctctttacgt | gcatgcattt | taccgtataa | 75720 |
| actgttttct | accctgcttt | ttctatttga | cctatttttg | aaatgtcatt | ttatttagaa | 75780 |
| cttctctatt | tattttaaca | gctgcataat | tagcagtaaa | acttatgtaa | gcagtcctct | 75840 |
| gtgaagggct | gtgtcttttt | gcgattatat | ccggtgctat | agtgtacatc | cttgtgtgtg | 75900 |
| catcttggtg | tgctgtgtgt | acgtatttct | gtaggataaa | tctgtaaaag | tggaatcact | 75960 |
| aggctcagagg | gtatgggtcca | ttttctttac | ttattttatt | tattttattt | ttcattttatt | 76020 |
| tttgagacag | agtcttgctc | tgctgcccag | gctggagtg | agtggcatga | tcttggttta | 76080 |
| ctgcaagctc | cgctcccggg | gttcacacca | ttctctgccc | tcagcctccg | gagtagctgg | 76140 |
| gactacaggg | gcccggccacc | cacgcctggc | taattttttt | gtattttttg | tagagacggg | 76200 |
| gtttcaccat | gttagccagg | atggtctcga | tctctgacc | tcgtgatcca | cccatctcag | 76260 |
| cctcccaaag | tgtggtgatt | acaggtgtga | gccaccgcgc | ccggcccat | tttattatct | 76320 |
| ttatttgctt | ggatccttct | tagcttcttc | aatgttaaag | atattgacag | tttctctctt | 76380 |
| actgaaat | ataaatccat | tgactcctct | gatattattg | ccctggcctg | actgattctt | 76440 |
| ctctctcctt | tctcttctca | ccccatggtg | agggtcccaa | ggtcacaccc | agttttgatg | 76500 |
| actcaccagc | atagagttgt | acttgtgcct | atgattttatt | gcggtgaaag | gatataagagc | 76560 |
| aaaattgcaa | acggaaaggc | acctgggggtg | aattccaggg | gaaatccagt | gcaagttcca | 76620 |
| aggctgcctc | ccagtggagt | cacataggat | gtgcttacat | cctccagcaa | ggagttgtga | 76680 |
| caacacttgt | gaaatgtgga | ctgccaggga | agctcatcag | agcctcagtg | cctagggttt | 76740 |
| ttactggagg | ctgggtcacat | aagcacctct | acacatatca | aaaaattctg | gtcccccaga | 76800 |
| aggaaagcag | gtgttttagca | taaccatatt | atgtgcatga | acagttcagg | tacaggaaat | 76860 |
| ccccgttacc | agttagggtg | gtgggtgccc | ttctcaaate | ccaagttccc | agacaccagc | 76920 |
| caggggctctg | cctcgtaagg | aggcctttcc | aggacagcag | tcaggcctgc | caatgttaat | 76980 |
| tcttttctgc | actacctccta | attttagaaa | ccaccgagcc | tttgctgcct | gacctgtcct | 77040 |
| gcttttctgat | ttcttttatct | actttgatatt | ctttacaaat | gatcttttacc | ctgacttttta | 77100 |
| aatgtgtgct | ctggccattc | acctagcgtg | tggttctgag | tctccaagtc | ttagcagatt | 77160 |
| tgtctctaga | tgctctgcca | acgcttcaca | ccaagtatta | caaactaaac | tcgtcatctt | 77220 |
| cctctgaaa | cctgtctccc | aggccaggcg | cgggtggtca | cacttgtaat | cccagtactt | 77280 |
| tgggaggccg | agggtgggtg | atcacctgag | gtcaggagtt | cgagaccagc | ctggccaact | 77340 |
| tggtaaaacc | ccatctctac | gaaaaatata | aaaaaattag | ccaggcgtgg | tggcaggcac | 77400 |
| ctgtaatccc | agctattcag | gaggctgagg | caggagaatc | gcttgaacct | gggaggcgga | 77460 |
| gattgcagta | agccgagatc | acgccattgc | actccagcct | gggcaacaaa | agtgaactc | 77520 |
| catctcaaga | aaaacaaaaa | acaaaaaaca | aaaaacctgt | tttctcccca | gctttgtcat | 77580 |
| gtatttagtg | gccttatgta | gacagtttcc | tttgaaacat | ctcttggaact | tctctgctct | 77640 |
| tccagggccca | ttgccaccga | cctggaatgt | gtccttatcg | tttcacgcca | ggcttatggc | 77700 |
| agcagtcagt | caccagatg | acctcctgac | ctctggctta | tttcaccccc | actggactgt | 77760 |
| tgcttctaaa | cacttctttc | gtatgtcact | ctaaaatctg | acctggctg | tacctttctt | 77820 |
| taactactcc | ctgactgcgt | gctgagagaa | gatgggtctt | gtcttttctt | gcctctctgc | 77880 |
| ttttgtaaac | tgccatttct | acctgaagtg | gcaactgaaa | tcatactctc | ttcataaact | 77940 |
| gtctttggct | acctcagtta | gaattcctta | tccatttttc | ctgaagcatt | tctttgactc | 78000 |
| ttctttactg | ctccccacc | cttttttttt | tctttgagac | tgaattttgc | ttgttgccca | 78060 |
| ggctggagtg | caatggcccg | atctcggtc | attgcaacct | ccgctcctg | ggttcaagtg | 78120 |
| attctcctgc | ctcagcctcc | tgagtagctg | ggattacagt | catgtgccac | catgcccggc | 78180 |
| taattttgta | tttttagtag | agatggggtt | tctccacgtt | ggtcaggctg | gtcttcaact | 78240 |
| cccaacctca | agtgatctgc | ccaccttcgc | ctcccaaat | gctgggatta | caggtgttag | 78300 |

| | | | | | | |
|-------------|------------|-------------|-------------|-------------|-------------|-------|
| ccactgcgcc | tgacccccat | tttttttttt | tttaaagatg | ttgaattggt | cagggtttgt | 78360 |
| agttacaagc | aacagaagcc | aactctttta | gcagaaaagg | aatttgctaa | atgatatgtc | 78420 |
| agagttctca | gaatctctag | caggatgaag | aaccaggcct | ggagaatagg | tagccacaga | 78480 |
| tacacaagca | tactgttaga | cggttcccat | gaagaggcat | ctgttgctac | cactggacac | 78540 |
| agatgggtact | gtgtctctgc | tactctacca | atgccactgc | tgtctctgac | cccagatgta | 78600 |
| gctccctctg | accctggatg | cagctccctc | tgaccctgga | tgcagctccc | tctgaccctc | 78660 |
| gatatagctg | cccctgaccc | cggatgtagc | tgcccttgac | cccagatgta | gctttctcca | 78720 |
| aaccagata | tagcggctgc | ccccttgcca | gagtgaatac | tgcgctattg | tggcttcttc | 78780 |
| ttgtcactgg | ttcttactta | aaagctgagc | tggaaattct | aatgggcagt | tttgtcacct | 78840 |
| gctcttacct | tgttgcagtc | tagatgaggt | ctaattgttc | taagctaggg | gattttcaga | 78900 |
| tatggaaagg | gataccaatt | ttcagcagcc | aaatagagta | tcacattttc | actccatggt | 78960 |
| tcctgggtgt | ctgttatggt | tcctgggtgt | ctgactctta | ggcttctttc | aaagctgcagt | 79020 |
| ctgcctaata | gagagccttg | catttaatac | tcaaaaaggc | aaagcaatat | gaatcagcaa | 79080 |
| gggtgttttg | gcaataaaca | gcaaacctga | ctgtggcgta | agcttgtggt | attgtctcca | 79140 |
| gtgtgatcag | atctgtattt | taatttttta | aatgtaaatt | aataatgatc | tgtgaatcac | 79200 |
| caaagtagct | tggagtagcc | tagaaaacaa | tgtatgtcct | ccgttttcac | agaagccaca | 79260 |
| tagtcgtggg | ttaaatgagt | cagcggcagg | gcactgtgtc | tcatagttaa | aaaaaaaaaa | 79320 |
| aagtattact | gaagtaatgc | aggatctttt | ctgaagtaga | aggcatgatg | aaccagaaa | 79380 |
| actaaagcag | caagtggcca | ccgttcttag | catagttggt | tctcaaaactg | gaacaacctc | 79440 |
| taaacagttg | tgaacaaggt | attagaagtg | atgggggccc | ggtgcggtag | cttctcccaa | 79500 |
| agctcattac | ctcccaaagc | aaccccagta | ctttgggagg | atcactttga | gcccaggagt | 79560 |
| tccagaccag | cccgcccaac | atggcaaaac | cccactctct | taaaactaca | aaaaattagc | 79620 |
| tgggcatggg | ggcacatgcc | tgtagtcccc | gctacttgga | tggctgaggc | aggagaatcg | 79680 |
| cttgaaccgg | gaggcagagg | ttgcagtgag | ctgagatcac | gccactgcac | tctagcctgg | 79740 |
| gggacagagt | gagtcctctg | ctcaaaaaaa | aaaaaaaaaa | aaaaaagtga | tgggaataga | 79800 |
| ttgttttgtc | tcaaaaagct | ctttccaaca | ctaaaatgaa | acataataatt | aaaaatatatt | 79860 |
| ttctggctat | aaaaatatcg | atgcttatta | tagacatctg | caaagtatga | aaatatatga | 79920 |
| agaaaaaaat | taaaatgcca | tcacccccca | tgaaaactat | tgttatcatt | tttgtctgat | 79980 |
| ttcttttagtg | tttctctttt | tcttttttta | atttttaatt | tttttgagta | tgtagtatgt | 80040 |
| atatctattt | atggggtata | tggcatattt | tgatacagga | tacagtgtgt | attagcaagg | 80100 |
| ttttcttttt | aatgtttata | tttatttagt | tgagatcata | ctatatatgg | ctctatagat | 80160 |
| tactttctct | tatattacta | acatttgtgt | tattaaatat | tctgcataaa | gataatttta | 80220 |
| agatgaaatt | tgatgttata | aaaacttctc | attttattaa | gagattaacg | ctatgaaacc | 80280 |
| tgctgctata | tattcttyga | accagctgtg | acccaaaaga | tcaatgtagg | gatgtaggtc | 80340 |
| cttccccatt | ctctacacac | aaaatcagat | actctgatgt | gcagctgtag | ccccagtcta | 80400 |
| cactgtctgt | tgtatttttt | gttttctggg | gtcacgtgcc | tcccaccctg | ctcctagcaa | 80460 |
| ttgccatgac | aacaaataga | taattggcct | ccgtaatttc | tcactcttatt | gcctaaggca | 80520 |
| acagagagct | tgtgggctca | gcttgcggtt | cagcagctgc | tttgttgcc | ctcctctgta | 80580 |
| tgtgtgaggc | ctgccagagc | ccactttcca | gacagggtgag | agttcattca | ttcaccatgc | 80640 |
| agttaccgat | cgtctcttga | cctgtgtcct | ggggaggtaa | agggtgacgag | ccagttctgc | 80700 |
| cccatgcagc | tcacagctca | ggcaaaagta | cattgcaaaa | aacagaatcc | aaagtgcctat | 80760 |
| catgaaccct | ctgagagggg | ctgactcagc | agcccaggga | gcttgaagaa | ggctccacag | 80820 |
| aggaggctgt | gcctcaaggc | gatttcgggt | taggagccac | caattttata | ccacttttct | 80880 |
| gtggcccgtc | ttattttatt | tcttatttct | tgacaatcag | aagtaccttg | ggtaggtttt | 80940 |
| accatgcaca | tcgtaatttg | agtgaagctta | gtgtgaggct | taacgggtgtg | tgggctgtac | 81000 |
| atcctgggtca | gatgctccag | atggaggcag | atggttgtga | tgcaggagag | gcagccacat | 81060 |
| agcacaggtc | cccagccagt | ggactgggaa | gacagtgtag | tcactctctgg | ggaaggggaa | 81120 |
| tgacaagatc | tggcagtgtg | gcaggctcca | gaaaaaaagg | gctgggttct | gggcagtgtg | 81180 |
| gggtgcagggt | gagacctgaa | tactgggtgg | agccagctgt | cagagtccac | gcctgcagac | 81240 |
| tggactggtc | cacggcaggt | ggatgccatg | tcttgaagac | ccacaggcac | ccactcatcc | 81300 |
| tcatgatcat | gcagttctct | ggtttctaac | agtgcagctc | gggttgagct | ctgggagtc | 81360 |
| agcagagaag | agcaggccct | ggaatcccag | gtgtgggggc | gtggcttaac | gtggagtttc | 81420 |
| cttcagaggc | agtgaagtgt | tgtcattgtc | tccgtcagca | ttggcttttg | gcctagtgtg | 81480 |
| gcctcgaacc | ttctgttggg | atcagcagtg | gaacagtagg | aaaagggaatg | agtagacatg | 81540 |
| gcattgcaac | aagtcttttt | ttttttttct | gttagaatta | tcataattaag | cagaagtttt | 81600 |

| | | | | | | |
|-------------|-------------|-------------|-------------|-------------|-------------|-------|
| gcttcacaaa | ctctcagcca | aatacaaaaat | actatgaata | gtattttacct | tgtgtctcttt | 81660 |
| tccaaagaac | tcatagtggg | ttgcagctat | tgcagatata | ctggccatgc | gggatgcggt | 81720 |
| tccttttttt | tggttttttt | ttttttttga | gacggagcct | tgctctgtcg | cccaggctgg | 81780 |
| agcatagtgg | cgcgatctcg | gctcactgca | agctccgcct | cccgggttcg | tgccattctc | 81840 |
| ctgcctcagc | ctcccagagta | gctgggacta | caggcgcccc | ccaccacacc | cggctaattt | 81900 |
| ttgtattttt | agtagagacg | gggtttcacc | gtgttagcca | ggatgggtctc | gatctcctga | 81960 |
| cctcgtgatc | ctcctgcctc | ggcctcccaa | agtgtctggga | ttacaggcgt | gagccaccgc | 82020 |
| gccccggcgc | agttcctttt | tatagctggt | tgaataggaa | agatgacttg | gaaaatgctg | 82080 |
| gattctgaga | tttatgtgca | gccttaaaaa | gtgtagtttt | tctctatcaa | taatgagtgt | 82140 |
| gggttgtaat | tgcttagtaa | gtaattttgt | ttatgtaaac | gtacatttgt | taaatttttt | 82200 |
| ttcttaggta | atcccgtatg | ttggcaccat | ccccgatcag | ctggatcctg | gaactttgat | 82260 |
| tgtgatattg | gggcatgttc | ctagtgcgc | agacaggtaa | aatcactgtg | ctaaagggaag | 82320 |
| gagcatgaat | aggctgtctt | tttgtgattg | tggaatgata | acagagtaag | gcgggagaga | 82380 |
| ccatttgata | ctctgaggcc | caattagctt | tcatcagcag | ccctggccaa | ggtgctgagg | 82440 |
| agattggaat | gaatgactaa | ataaagggtta | ttgggattta | tttcattgct | gtaagtctga | 82500 |
| tttcagtata | aaaaaattag | aactatcagc | tggatgtggt | gacttacaca | tacttttcca | 82560 |
| gcactttggg | aggccaaggc | gggaggattg | tttgaggcca | ggagttcgag | accagcctgg | 82620 |
| gcaacatagt | gagaccccc | ccatctgtta | aaaaaaaaaa | aaaaattaaa | aattaactgg | 82680 |
| gcttggtggt | gtgcgcctgt | agttgtagct | actcaggggg | ctgaggtagg | aggatccctt | 82740 |
| gagcccagga | gtttgagggt | gcagtgcgct | gtgatggagc | cactgcacta | tagcctgggt | 82800 |
| gacaaaaaaaa | aaaaaaaaaa | aaaaaaaaaa | aaaagaaaga | aaaagaatta | ggtatgtcat | 82860 |
| taaagaaagg | aattgtggtc | agatgacagg | gagagtctag | ttttagtctg | acattcccac | 82920 |
| agcatcacag | atctagtcca | gatggtttta | ctgaataact | gctttggata | caagctgtgg | 82980 |
| tatcattagt | gttgggctca | gctctgtgta | cctaaccctt | gaagagcagt | ggtttaagat | 83040 |
| gtgaaaatta | agtcctcaagg | agacagccca | ggccttttca | gttaactcct | tcaagtcggt | 83100 |
| agagaagtag | actccttcca | gcttaccact | ctgctatctt | gaggggtgagg | tgaggtcccc | 83160 |
| tttcccatta | tccttggcag | ctagatttcc | agccctcact | tctgtgcttt | gggtagctgg | 83220 |
| atgggtgcat | gtggtgtttg | cggggaaaca | gagctggaca | aaaggcaagt | gcttgcctgac | 83280 |
| ttttaaggca | gtttctagta | gccttccttg | agcacttcac | ttccatctta | tcagcagagc | 83340 |
| tttagctgca | caggcaggcc | tagctgcgag | ggaggctggg | aaaggtaggt | ttttattctg | 83400 |
| ggcagattca | gacccagttc | aaactcaggg | gctattttac | tgaggaagac | agaaaagatt | 83460 |
| agacagtcag | ctcttttaggc | ctcatagtga | atgaatgagg | agggattggt | cagtcctctg | 83520 |
| tactggggcc | tggagtgtag | tgcctgctgg | gcctttactg | gtggctttcc | tttctgagca | 83580 |
| ctcatgaggc | ccctgtgtct | tccctcatat | agattccagg | tggatctgca | gaatggcagc | 83640 |
| agtgtgaaac | ctcgagccga | tgtggccttt | catttcaatc | ctcgtttcaa | aagggccggc | 83700 |
| tgcattgttt | gcaatacttt | gataaatgaa | aaatggggac | gggaagagat | cacctatgac | 83760 |
| acgcctttca | aaagagaaaa | gtcttttgag | atcgtgatta | tggtgctaaa | ggacaaattc | 83820 |
| caggtagggt | ttggagaggg | acaggttgag | tcttcattag | tgagcaggag | tgacacgggg | 83880 |
| ggcctttcac | atttgtgagc | ccagccttgt | atttccctaca | cctgagatat | agtttggtct | 83940 |
| tgtagtcctt | ctccataaaa | ggaccaggaa | ggcacctaaa | tatgaggggg | tggcaccact | 84000 |
| actctccagc | cagttgtgtg | catgcagaaa | tatggtccac | tgtgactaga | tctttttatt | 84060 |
| agatcctatt | tctcctagca | gggctgagtt | ctgaattgac | acagtattat | gttcatgatg | 84120 |
| ggagggtaag | ttataatata | accgtcacca | cctgaagaac | taacaagggc | aatcccagca | 84180 |
| tagaaatcag | aagggttttg | taaattcaag | tcttgccaca | agacagttct | gtaggatcat | 84240 |
| gagattttta | gacccagagg | acatcctaga | aatccttgat | gtcagttcca | tctctggctt | 84300 |
| catggagtgt | cttataccta | gcgcgcgtgt | gtatggttga | atttggtccc | agaagctctt | 84360 |
| acacctgctg | gccctctggc | ctgtggagct | ttcccacagt | agaggtttgt | accaacgtga | 84420 |
| gagaagactc | acatgcctct | ggcacagatc | ctttctgata | ttcgggatac | tgctcctgcc | 84480 |
| cgaaagtctt | tctgaatctc | ccaaactcca | ttcacctctc | ccttctctgg | ccttttgagc | 84540 |
| ccgtgtctgt | atcattcttt | ttcacagttt | ttaacagttg | tgctttggct | ttatgtgttt | 84600 |
| attttgctc | cacaatggga | tttaaagctc | cttgagtcag | agactatatt | gtatgctgct | 84660 |
| cgcgttttct | gcctataacc | taacgtggta | cctggcattt | gagagggagg | gagggaggag | 84720 |
| gctcgtagcg | tgccgaggac | ctgcagaagc | tactttctcg | tcatcttact | gtagtctgtt | 84780 |
| gaggtagaga | ttgttcctac | ttcagaataa | gaaaaccgaa | ttcaaataatg | ttgggtaact | 84840 |
| tgtccatatt | aattttattta | gcaaatacaa | cagattttga | gtgtctgcca | catgggtggt | 84900 |

| | | | | | | |
|------------|-------------|-------------|-------------|-------------|-------------|-------|
| ctccagggac | agtgttgtgg | ggagctcgca | ggcagatcct | taacctgggt | tcacaatctc | 84960 |
| cagggcacct | gtgcctgggc | ttccaggcga | ccttcgaacc | cagatgtctc | acatgtatgc | 85020 |
| agaggcgac | acaagcacac | gcacatatac | ttatgactgc | ctgtttgtct | ggggagagac | 85080 |
| agttcctggt | gcttaatcaa | atcaggaact | caaaagaagt | tcggaagcac | tgctggtggt | 85140 |
| ttgggtgctt | tcggttacca | tttggtcacg | tgtgtggaga | cctgtgggaa | caggtataaa | 85200 |
| attggacgca | aggaaacatt | taaatttggg | taataagtta | atttattaac | tgtttttttt | 85260 |
| tggtggcggg | ggggctctgt | cttctgtatc | tctctaggtg | gctgtaaatg | gaaaacatac | 85320 |
| tctgctctat | ggccacagga | tcggcccaga | gaaaatagac | actctgggca | tttatggcaa | 85380 |
| agtgaatatt | cactcaattg | gttttagctt | cagctcgggtg | agtgccttc | cacagcttgg | 85440 |
| ggtcttttat | gaggatgggt | tctgatgaga | tggtagaaaa | aatcttcaaa | taacacttct | 85500 |
| attgacataa | aaaggacgta | tctccctgac | tgtagtatta | atttttttga | agtgaactgt | 85560 |
| tcacactagc | agaaggctgt | ttatcagcca | gggcttcatt | gtctgttaga | tctcaaacct | 85620 |
| agtgtgggtt | taataaaaaca | cacacagttt | ttagctgggt | agcagctatt | tcctttgcat | 85680 |
| gggcataaaa | tggagtattt | ctgtaagaca | ggttcctagg | ctgggagtgt | ctgagtcaaa | 85740 |
| gagcacagtc | atgtgttgca | taaggacagt | tcagtcaaag | atgaaccgca | tatacaaccg | 85800 |
| tggtcccata | agattgtcat | atactgtatt | tttaccatac | cttttctatg | tttaggtaag | 85860 |
| tttatatgca | caaatactta | ccatcctgct | ctggttgcct | acagtattttg | gtacagtgcc | 85920 |
| tgctgtacag | attcactggc | caggagctat | aggccacacc | ctacagccta | ggtgtgtagt | 85980 |
| tggcagtacc | atctaagggt | gttaagtaat | attctgtgat | gtttgcacga | tgacaaaagt | 86040 |
| catgtaagga | cacatttctc | agaacatacc | cccttcgtta | agcaacacat | gactgtcttt | 86100 |
| gcattgaaaa | ttttgataga | tactaactcg | cccttcacaa | gggtaaaaac | agtttgact | 86160 |
| ctcaacagcc | atgctcccac | cttcttgggt | acattacatc | ttattctctg | taatgtttgc | 86220 |
| caatctgatg | gggggcgga | aggaccccag | tgtcaagtat | atttttggat | catagtttct | 86280 |
| aagcatattt | ttagtaccat | ttataatttt | tttatatgtc | aaacaggtta | tatatagaaa | 86340 |
| atattttcta | ctggatgtta | caaattaatc | tttattatct | tttctcagga | cttacaaagt | 86400 |
| acccaagcat | ctagtctgga | actgacagag | ataagtagag | aaaatgtaaa | tattaaatct | 86460 |
| tttaatgagc | cactggttta | aaaatgttgt | tttagctgcc | atgttaatga | aatggcaaga | 86520 |
| aggctgggtt | tttgaaaatt | atgcttttag | aacgcaagta | atcacttgaa | aattgagata | 86580 |
| catacttgtg | gtgccaggca | cgcagtaagt | ttttgctgat | gattcacctg | tcagtttctg | 86640 |
| taactgccac | tcactgttct | tatgtaaaaa | gcactctctc | actcttaact | gctgaatagt | 86700 |
| actgttctgg | ggtattttcca | aatattgaac | atcagccagt | gcactggcaa | atgaacttcc | 86760 |
| atgtgtatct | tcaaccctcg | ggagaataac | tgcaatttaa | aaatgcgctg | ttattaatgg | 86820 |
| agaaagtgag | gtcttaccga | ctggcacggt | cacacctcac | agacagaata | gaatcttagc | 86880 |
| attctggggg | caccctggaa | aggacaaact | agacacgttt | gaagtctcatg | tagtgctggg | 86940 |
| tgaaggtggt | ggctcaggcc | tgtagtccca | gcgctttggc | tgaggtgggg | ggattgcttg | 87000 |
| agcctaggag | tttgagatca | gcctgggcca | catagggaga | accccatctc | tacaaaaaat | 87060 |
| taaaaaatta | tctgggcatg | gtggcgcatg | gctgtgatcc | cagctttggg | tggtgaagt | 87120 |
| aggcggatga | cttgagccca | ggaggttgag | gctgcagtga | gccatgattg | agccactgca | 87180 |
| tcccagtgtg | gatgacagag | taagaccctg | tctcttaaaa | aaatttcata | tagttctatg | 87240 |
| aaaaattatt | aatttatggt | ggaggataaa | ggactcagat | gaacagggat | atcagactct | 87300 |
| cttctcaacc | cgtgtagccc | ttcacaaacac | cataccattc | cgtcataaag | caccagctgc | 87360 |
| ctggaggtca | caccagagtg | gagcaggaac | atcccaggct | ccggccaggc | tcagctcagc | 87420 |
| acaaccaaga | cttcagatta | taaactataa | ttcttccctt | tctaacattg | ttgtgttttg | 87480 |
| tttcttttcc | aataggttcc | aaagtctggc | acgccccagc | ttgtgagtat | ttttgcctgg | 87540 |
| gttatttcat | gtggaatatt | ttataaagtt | gcatagaaaa | tgaacagttt | aaaccgtgga | 87600 |
| gggcagcttc | attcattcca | ttccttactg | tagaactggt | tccttacagc | ctagtaatatg | 87660 |
| aggaggagac | atttctaaaa | tcgcacccag | aactgtctac | accaagagca | aagattcgac | 87720 |
| tgtcaatcac | actttgactt | gcaccaaata | accacctatg | aactatgtgt | caaagggttg | 87780 |
| aagagcccca | aattttctta | actctgtata | aaaattaagt | tgtaatgagc | tgttacgagt | 87840 |
| aacctgtatc | cacaatagaa | gccc aaagca | gccccctctg | catttgtgtg | ccgtccctgg | 87900 |
| atggattcga | gagtcaacca | ggcctgcctc | tgagccattc | ctgtgtattt | cctcagcacc | 87960 |
| tccctgcttg | gctgcttccc | cttcaggcag | aacacagtac | tgccctcagac | cccaggcaca | 88020 |
| gggggccttc | ctggcgtggt | tactcatac | agagggcatc | gggtccacc | ctgtcactca | 88080 |
| tttcatcgtc | taaaatgtaa | tcatgagtgt | ttgcttcgag | ccagggacag | tgctgctgca | 88140 |
| ggggacccag | ctgggaccaa | ggcagactgt | ctctcccctc | ctgggattta | cagggtcatg | 88200 |

| | | | | | | |
|-------------|-------------|-------------|-------------|-------------|-------------|-------|
| gctctgaaac | attctgtagt | gttcttttga | cacgagtttt | ccctggagat | cgctttctgc | 88260 |
| aggcctcttg | gtcctgactg | tggtctcttt | tcagagcctg | ccattcgctg | caaggttgaa | 88320 |
| cacccccatg | ggccctggac | gaactgtcgt | cgttaaagga | gaagtgaatg | caaatgccaa | 88380 |
| aaggtcagta | tccttcggtg | ccagtcacag | tcagataact | tccgtgcctg | ttaccgcctt | 88440 |
| ctacccgtga | acggctcctgt | gagctggaag | tagggctagt | gtcagaatct | tcatttccaa | 88500 |
| agtgagatga | ttcaagcagg | aggtgggttag | attgtgaaca | gccagtgggc | agcagagccg | 88560 |
| actaaggccg | tggtctgacc | tcggcttttt | ctggccagac | aagagagtag | catttttgtc | 88620 |
| cacgaggcct | atccttgcc | tgtagaactc | cagagcagcc | ccgtaagatc | aggcaacatc | 88680 |
| ttttcttttt | ttttttgaga | tggagcctca | ctgtgtcacc | caggctggag | tgcagtgtca | 88740 |
| caatcccagc | acaccacaac | ctccgcttcc | tgggtgttca | agccattctc | ctacctcagc | 88800 |
| ctctggagta | gctgggatta | caggcgcacc | accacgccc | gctacttttt | gaatttttgt | 88860 |
| attttttagta | gagacagggg | ttcaccatgt | tggccaggct | ggctctggaac | tcctgacctc | 88920 |
| aagtgatccg | cccacttcgc | cctcccagtg | ctgggattac | aggtgtgagt | cgccacgccc | 88980 |
| agcccaggca | acatttttta | gggcccctct | tgtcatgtga | tttagaaaat | ttctgcttta | 89040 |
| acaacttttt | ccacagacgt | ccagccttct | gaaagcttga | aattagagct | atttcctaga | 89100 |
| aagtggcata | ctttcaagaa | ggaaggaaca | cgggtagatg | atgaaaagag | aataacctgt | 89160 |
| tgagaggatc | ccaggctcct | gcagcctgaa | gtagtcattc | agtttagcgt | taaaccttcc | 89220 |
| atttctgtcc | aaccacatct | cagcctcaat | gctgatttta | aaggggtttt | ttttttcgta | 89280 |
| tttttatttt | gcaagtaacg | aattagtggg | atgctgactg | ggtttaaaat | ttcaacttca | 89340 |
| cctgcattcc | catgtccatg | tggatacgtg | tgtttcatag | agttagaatc | atagttcaag | 89400 |
| tctggctact | aacattgtctg | aaattgccac | tactctgtcc | tacttggtta | attaaggttt | 89460 |
| tttttttctt | tcctttctaa | aagctttaat | gttgacctac | tagcaggaaa | atcaaaggat | 89520 |
| attgctctac | acttgaaccc | acgcctgaat | attaaagcat | ttgtaagaaa | ttcttttctt | 89580 |
| caggagtcct | ggggagaaga | agagagaaat | attacctctt | tcccathtag | tcctgggatg | 89640 |
| tactttgagg | tgaggttcca | gtttttgaaa | atgggacagc | aataagaatc | ctgggagcag | 89700 |
| gggtgggata | agtgttccat | ttaaatcaag | tcctaactca | gtatgtggag | gttgtgtatg | 89760 |
| ttttttgttt | acttgagat | tgtaatttgc | cccttccctt | ttataacgtg | ggcaatcagt | 89820 |
| ataaatggca | aagccagtag | agtgtcaaat | tatgcacatt | ggaattgaca | tttgtcatca | 89880 |
| tattaaaatt | cctgtgtagc | cccatattga | taggaattta | accaggaagc | ttgtctcagg | 89940 |
| actggagtca | cacattttaat | catataagca | gacttgagga | ctggagaccc | taaaactgct | 90000 |
| tgcttgcact | ggccatcatc | tcccatcagg | gtaggtggca | gtcctttctc | ctaaggagtt | 90060 |
| agtcttggtt | atatgtattc | aaggaaaaat | acatcagtc | cttggaacta | aaaggcatgc | 90120 |
| agtcctgagt | cccagatag | gtgaatattg | taacacatac | ctttcccgaa | atatgtttct | 90180 |
| gggatgctga | gcagagaata | gtctccttgt | gagtgtggatg | ccgggtgttt | ggccagcctc | 90240 |
| aatcaccagc | tcaggtgcca | ctgcctcaca | cagtcactta | gggtcattgg | tttaggttat | 90300 |
| cattctacag | catttttaaac | tgacacattg | tctggaccat | gtgggttctt | gaggactcat | 90360 |
| caaaacccgt | tactaaaagc | atgaatatca | ggcgaaatag | atagcaatgt | gacattcgta | 90420 |
| tttatcccta | agttccagtc | taatgcagtg | ccctggtagt | tggagtgtag | acagatgtgg | 90480 |
| gctaatacatg | gaaggttccc | tgggaagttgt | ggatattggt | ttcgaattca | gaaagctggg | 90540 |
| aaggatgtgg | aaggctgaag | gttggctttt | ctagatttag | ggcatgattt | gaacaagtcc | 90600 |
| ttagagttgg | gaagggcagc | acagggttgt | tggcttggca | agagtcaagg | tgcaaagggt | 90660 |
| gacttgggg | tcactggagg | gaaacagaga | tgagtgtctc | agaagggaag | tgagccttgt | 90720 |
| gggtgggtgac | aggaaaccaa | tgatgtaact | tgtttttgac | ctatctgggc | cccaagtttg | 90780 |
| gatctgctat | attaatataa | aaaaggataa | taatgataca | ttcaaataat | gctgaaaaat | 90840 |
| actaagatga | aaatacctcc | aacttcgtaa | ttcaaaccat | accattagga | ttaggtgaac | 90900 |
| cacattccag | gcgttttttt | gcagagacag | tgaagggat | ggctggctga | aggaatgaat | 90960 |
| agatgaatgt | tatatgcttt | tgaacaatcg | tcttttccat | tttaattttct | aattcaggag | 91020 |
| cagtaattat | ccttggtgtg | atcactgctg | acgattttct | atactgatag | gtcctttccg | 91080 |
| ggggcttcca | tctcttgcc | tttaaatatg | cttgcatgga | gattatctca | ggcttttcca | 91140 |
| ttatgccatt | actttcattt | taaatcttct | tgtcttttca | aatacacttt | agttgtatct | 91200 |
| acagtgtttt | aaaaacaatc | tcattcagtg | ttgtaatttc | atctgtgggc | tcttccctctg | 91260 |
| gatgaaatcc | gtgttcctcc | cagctgttcg | gcagcatcag | atggttgtga | gggattctgt | 91320 |
| tgttctgttt | tcttctaggc | aaaggatgtg | ccttcttttc | atgtgcagta | gtctgtctac | 91380 |
| ccggaagcat | gtcatttctt | tgccacttgc | ttgtaattca | ctggctttgc | acttgtctctg | 91440 |
| atacagtaca | ggtaactaat | tgactccctc | tgctgccaac | ttggttttcc | ttctgagcta | 91500 |

| | | | | | | |
|-------------|-------------|-------------|-------------|-------------|-------------|-------|
| tagcatcagg | ctgtgtgttt | tgtgtttttct | tgagattttg | ttaaataatat | ctgggggtccc | 91560 |
| ttctacctgg | ttggaactgg | gattcccacc | attcttgtgg | ggatagaatc | tcagggttaca | 91620 |
| cctattttccc | caatcctctg | tagccacaga | agcttcatct | tggccagctc | tgttatcaga | 91680 |
| gtgcaggact | tgggctgaaa | tttccctccc | ttcctgattt | tccttgacag | tcctttccac | 91740 |
| tgctcctatc | aatcaaaaaga | atgaaaaccc | tcaacttgct | gctttgcaga | ttcagggtttt | 91800 |
| gtgcttcttt | ctggcctctc | gggggtggggc | cgggttagca | gcaaggctga | gctgcccctc | 91860 |
| tttcttctga | agccttcatg | ggggcgagga | gcacagggag | agctcagtgc | agggcctccc | 91920 |
| agtggccttc | tcagagtggg | tggaaaccca | gcctggcact | ggcagcgtgg | caccagaagt | 91980 |
| atgaagtgtg | ggtgtaaagg | tgatgtaaaa | ggctagtagg | tttttttggt | tttcattggt | 92040 |
| tgagttttgg | gcatagatga | ctgtgaaggg | cgaacactgc | cgatggatct | gaatgaattt | 92100 |
| gtagtatgtg | caccacttcc | aacttacggg | ataccagct | ttgacggctt | tggacaaaaca | 92160 |
| cactgaggcc | aagatgtgct | gagcttatca | ggatcaggat | caccaagcag | ctgtaaaaac | 92220 |
| cctagcaagt | gccttaagct | gctgaaattt | catattaatt | gtctgggttg | ttcatggtcc | 92280 |
| tagagtttga | ggcagaaaag | tcaggatcca | agtcctttgg | ttccaggcta | cagctggaaa | 92340 |
| cagcatctcg | gtgaactaaa | gcaaccatat | taggagtttt | cctgctttag | gagagtcccc | 92400 |
| agcatcggcg | aggagggggc | agcactctgg | ctttccagga | gcaaggggca | ggatgcggcc | 92460 |
| gagggagagg | ggctgtgttg | aggaaaggag | ggccgcaggc | cctgggggatg | gtgtgaggct | 92520 |
| ccaaacatgt | ccgagtcact | tccctgggtg | ggatgaggca | gacagtgcca | ccaccaggga | 92580 |
| cactttagtt | agattagggg | cttggaagtc | acagaaggaa | gtcagcagca | gcaggctgga | 92640 |
| acttttctat | gtataatcaa | atggtttact | ctgacaccgt | tagcatgtaa | caaacacaaa | 92700 |
| attttaaaact | aaggggaacc | actaatggca | tgtttccctt | cctttcagat | gataatttac | 92760 |
| tgtgatgtta | gagaattcaa | ggttgacagc | aatggcgtag | acagcctgga | gtacaaacac | 92820 |
| agatttaaaag | agctcagcag | tattgacacg | ctggaaatta | atggagacat | ccacttactg | 92880 |
| gaagtaagga | gctggtagcc | tacctacaca | gctgctacaa | aaaccaaaat | acagaatggc | 92940 |
| ttctgtgata | ctggccttgc | tgaaacgcac | ctcactgtca | ttctattggt | tatatgttta | 93000 |
| aaatgagctt | gtgcaccatt | agatcctgct | gggtgttctc | agtccttgcc | atgaagtatg | 93060 |
| gtggtgtcta | gcaactgaatg | gggaaaactgg | gggcagcaac | acttatagcc | agttaaagcc | 93120 |
| actctgccct | ctctcctact | ttggctgact | cttcaagaat | gccattcaac | aagtatttat | 93180 |
| ggagtaccta | ctataatata | gtagctaaca | tgtattgagc | acagattttt | tttggtaaaa | 93240 |
| ctgtgaggag | ctaggatata | tacttggtga | aacaaaccag | tatgttccct | gttctcttga | 93300 |
| gcttcgactc | ttctgtgctc | tattgctgcg | cactgctttt | tctacaggca | ttacatcaac | 93360 |
| tcctaagggg | tcctctggga | ttagttaagc | agctattaaa | tcacccgaag | acactaattt | 93420 |
| acagaagaca | caactccttc | cccagtgatc | actgtcataa | ccagtgtctc | accgtatccc | 93480 |
| atcactgagg | actgatgttg | actgacatca | ttttatcgtg | ataaacatgt | ggctctatta | 93540 |
| gctgcaagct | ttaccaagta | attggcatga | catctgagca | cagaaattaa | ggcaaaaaac | 93600 |
| caaagcaaaa | caaatacatg | gtgctgaaat | taacttgatg | ccaagcccaa | ggcagctgat | 93660 |
| ttctgtgtat | ttgaacttag | ggcaaatcag | agtctacaca | gacgcctaca | gaaagtttca | 93720 |
| ggaagaggca | agatgcattc | aatttgaaag | atatttatgg | gcaacaaagt | aaggtcagga | 93780 |
| ttagacttca | ggcattcata | aggcaggcac | tatcagaaag | tgtacgccaa | ctaagggacc | 93840 |
| cacaagcgag | gcagaggtaa | tgcaaaaatc | tgttttgttc | ccatgaaatc | accaatcaag | 93900 |
| gcctccgttc | ttctaagatg | tagtccatca | ctattagcaa | ctgagatcaa | agcactcttc | 93960 |
| cactttacgt | gattaaaaatc | aaacctgtat | cagcaagtta | aatgggtcca | tttctgtgat | 94020 |
| ttttctatta | tttgagggga | gttggcagaa | gttccatgta | tatgggatct | ttacagggtca | 94080 |
| gatcttggtta | caggaaattt | caaagggttg | ggagtgggga | gggaaaaaag | ctcagtcagt | 94140 |
| gaggatcatt | ttatcacatt | agactggggc | agaactctgc | caggatttag | gaatattttc | 94200 |
| agaacagatt | ttagatatta | tttctatcca | tatattgaaa | agaataccat | tgtcaatctt | 94260 |
| attttttttaa | aagtactcag | tgtagaaatt | gctagccctt | aattcttttc | cagcttttca | 94320 |
| tattaatgta | tgcagagtct | caccaagctc | aaagacactg | gttgggggtg | gaggggtgcca | 94380 |
| cagggaaagc | tgtagaaggc | aagaagactc | gagaatcccc | cagagttatt | tttctccata | 94440 |
| aagaccatca | gagtgcctaa | ctgagctggt | ggagactgtg | aggcatttag | gaaaaaaata | 94500 |
| gccactcac | atcattcctt | gtaagtctta | agttcatttt | cattttacgt | ggaggaaaaa | 94560 |
| aattttaaaaa | gctattagta | tttattaatg | aattttactg | agacatttct | tagaaatatg | 94620 |
| cacttctata | ctagcaagct | ctgtctctaa | aatgcaagtt | ggccttttgc | ttgccacatt | 94680 |
| tctgcattaa | acttctatat | tagcttcaaa | ggctttttaa | ctcaatgcga | acattctacg | 94740 |
| ggatgttctt | agatgccttt | aaaaaggggg | cagatctaata | tttatttgaa | ccctcacttt | 94800 |

| | | | | | | |
|-------------|-------------|------------|-------------|-------------|------------|-------|
| ccaacttcac | catgaccag | tactagagat | tagggcactt | caaagcattg | aaaaaatct | 94860 |
| actgatactt | actttcttag | acaagtagtt | cttagttaac | caccaatgga | actgggttca | 94920 |
| ttctgaatcc | tggaggagct | tctctgtgcc | acccagtgtt | tctgggccct | ctgtgtgagc | 94980 |
| agccaggat | gagctgtttt | agaagcagcg | tgttgccctt | atctctccc | tttcccaaaa | 95040 |
| gaacaaagga | taaaggtgac | agtcacactc | ctgggttaaa | aaaagcattc | cagaaccact | 95100 |
| tctctttatg | ggcacaacaa | agaaacgaag | gctgaagttc | gcctacccaa | aatgaaaagt | 95160 |
| aggctttaca | gtcaaaagta | cttctgttga | ttgctaaata | acttcatttt | cttgaaatag | 95220 |
| agcaactttg | agtgaatct | gcaacatgga | taccatgtat | ataagatact | gctgtacaga | 95280 |
| agagttaagg | cttacagtgc | aaatgaggcg | tcagcttttg | gtgctaaaat | taacaagtct | 95340 |
| aatattatta | ccatcaatca | ggaagagaa | aataaatgtt | taaacaacaa | cagcagtctg | 95400 |
| tataaaaaata | ccgtgtatca | tttactcttt | ctgcagctct | atacgatagg | caggagaggc | 95460 |
| ttatgtggca | gcacaagcca | ggtggggatt | ttgtaacgaa | gtgataaaac | atttgtaagt | 95520 |
| aatccaagta | ggtgtattaa | ggcaccacaa | gtaacatggc | acccaacacc | caaaaataaa | 95580 |
| aatatgaaat | atgagtgtga | actctgagta | gagtatgaaa | caccacagaa | agtcttagaa | 95640 |
| atagctctgg | agtggctctc | ccaggacagt | ttccagttgc | tgaatagtct | tttggcactg | 95700 |
| atgttctact | tcttcacatt | catctaaaaa | aaaaaaaaaa | aaaaatcaaa | attaaaatct | 95760 |
| gagtcagtct | gcctgcctcg | gttctcatta | gtttaattct | taatgccttg | cactttccag | 95820 |
| caatcattca | atcaaaagag | tgaaatgaag | cacattaaca | aagcaggagg | cgccacggac | 95880 |
| cgctccctc | cacaccgctc | cttccgcctt | cattcccttg | ccacaggctt | gcactggaag | 95940 |
| ctgaataaga | atccccaaaa | ctcaaacttc | ctagggatgc | caccccttta | gtagctcaca | 96000 |
| cctccccct | ccaagagcta | agaaacaaag | gagaatgtac | ttttgtagct | tagataagca | 96060 |
| atgaatcagt | aaaggactga | tctacttgct | ccaccacccc | tcccttaata | ataacattta | 96120 |
| ctgttatttc | ctgggcctaa | gacttatggt | ccagaactgt | cacagctccc | catgtcacac | 96180 |
| ccactagctt | gtgatctttg | tcaaataact | gaaatctttt | aagcctctag | tttcttccct | 96240 |
| tgtaaaacag | agataaaaatg | ttgtgggttt | taagtggat | aatccaagta | aagcacctaa | 96300 |
| catggagtag | tgaatgaaca | tcggttgcta | ctaaaagtgg | acatcctacc | gcatccttaa | 96360 |
| tgccactagg | catttccata | caatctgggg | acaaaaactt | caatcatata | aatgtatgag | 96420 |
| gttaattaaa | aacactactg | taatctgctt | gtatgatcac | aaaccaccac | aaaagaaaag | 96480 |
| atcgtgaaga | ttacactgta | aacggactct | caaagatca | ggaggtgggc | acttcgcaac | 96540 |
| ttgtccctc | cacccaactc | aaaacaggag | ctcgagcctg | cctgtatttg | agactggagc | 96600 |
| tgctgtatg | aggactggat | caactgctag | tcacgttata | tccaaatctg | cattatcatt | 96660 |
| gggcacattt | tcacagaatt | ttactgaatt | attccttaat | tgtttaatgg | ttgggaatag | 96720 |
| tttgggaatt | accttccatc | aactctgcta | agaaaggaat | ggattctggg | agcaagacaa | 96780 |
| tataattctc | cttttagttt | tcagccagtg | ctaaccacagt | aatcaaaagca | gcaaatcgaa | 96840 |
| cctgaaaggg | ataaaaagagc | aaagaaataa | aaagtagtgt | tactgtattt | attatcttaa | 96900 |
| gagctgtact | gacttgagac | aagctctaac | tttttaaaca | ttagttcaca | cgcgtttatt | 96960 |
| cacttcatta | tgttcattaa | gctttcatct | tagaatacca | gtttcaccat | ttgggagctg | 97020 |
| tttgtaatat | gtgcaacctt | ataaatagt | ttttccaaac | tgtgtcccag | gactgcaaat | 97080 |
| ctttaatgtg | aaatgtcttt | ttataatctc | ttccttttaa | aaaaaccaat | aaaataaaat | 97140 |
| gccacatgca | aactcaagt | tgtcaccaga | ttttacttca | ttggcgctcg | ccagcccgcg | 97200 |
| aggctggcaa | taaagtgcct | ccagccacct | ctggcaggtc | tctcaccaca | cagcccctga | 97260 |
| ctgggtcacca | ctatagttgt | atgagggggc | aggacaatcg | cttgggataa | actcccatct | 97320 |
| cagcactgaa | taaaaaacat | tctgtgtcac | aatatcctag | ttttggggct | ttaaaaacgt | 97380 |
| ctaggtgttc | ctcacatgcc | ttgtctataa | taaggaaagc | aagcagtagt | tgggtattgt | 97440 |
| tagcttttga | aacaaaagcc | ctactggtct | tctaattttg | gataatttta | ttaaagaata | 97500 |
| tctggacagt | acaaagtga | ttattaaaaa | accatttgta | actacctaga | ttcaatcagg | 97560 |
| atttccctga | tttgtgcaaa | gtaaaatatt | acaataaatt | tgatactgct | acttgtataa | 97620 |
| aaacctatgg | tttaaaatgt | gggggttcat | cataatagtc | tcattgttag | catatcctaa | 97680 |
| taaagaattt | gaactaataa | atcctattaa | taaaattctg | ctttgggtctg | ttatagccag | 97740 |
| taaagttcta | atacaatcat | tagtttgaga | aatgggtgact | cattgctaaa | acagtttgaa | 97800 |
| atttgtaaca | cttgggtgtc | aaattttgac | ttccactcaa | cctacccatg | ttttatttcc | 97860 |
| actgccacca | cttactcaac | aagatcataa | gcctagtatc | tataaacaac | agaatgtatt | 97920 |
| gctctaactc | aaaagactat | agtgtggata | aattcaatgc | atttctctct | ggagcacaa | 97980 |
| gacatttcaa | tagcacttaa | aaaagaagga | attacttcaa | atctttgtta | tttaaaagta | 98040 |
| tttagaaagt | atttttagtac | ttctgcccc | cgcaccattg | gggtggggat | agggcattgc | 98100 |

| | | | | | | |
|-------------|-------------|-------------|------------|-------------|-------------|--------|
| tattctttac | aaatagccta | taagtaaaaa | acaaaatfff | cttaggcaca | aattttctgcc | 98160 |
| taatacaaaa | gaccagacct | ctagtactgg | atgacaaata | gcaatgttct | tccctgccag | 98220 |
| tttactaggg | ggcctacatc | tgtgaccacc | tgcaggctgt | ttaggctatg | cagtgaagag | 98280 |
| atgcagtttc | agtacttgtc | acgcagttcc | taaccttagg | cgaggagtct | ctcgtcttta | 98340 |
| gcagaatctg | gtagttcagt | ggtttccaaa | gagagtcac | cgccatggcc | actgaaaact | 98400 |
| gtgcgatgca | tggatcagg | tgctttgtca | cccgttctct | gaatttctct | tctcccccac | 98460 |
| gcctgttttc | cagctaggaa | gagtaagaca | aagactttga | acaacaagtc | tcatttcttt | 98520 |
| cttctgtttg | aaaaaatgtc | caacatacaa | atattttact | atctttcatg | atattagcag | 98580 |
| gttcaaaaac | caggcattat | tctaatactc | tctagggcaa | atgtattgcc | ttctagaact | 98640 |
| caaagtgaat | ctcataccct | ttatcatcgc | ccctttctct | ccagcagaac | atctcagagg | 98700 |
| agctctttgc | tccagaggac | agccatgctc | tgcacagttc | tcagtgaggc | ccagttaaaa | 98760 |
| caaatagaata | cattaaccat | gacagcttat | atcatgtctg | tcttttgagc | agtttaaaaa | 98820 |
| ataaaaaata | aaaaataact | cagggccagg | catggtggct | cacgcctgta | atcccagcag | 98880 |
| tttgggaggc | caaggtgggt | ggatcacttg | aggtcaggag | ttcgagacca | gcctggccaa | 98940 |
| catggcaaaa | cctcatccct | actaaaaata | caaaaattag | ccaggtgtgg | aggcggggcg | 99000 |
| ctgtgatccc | agctattcgg | gaggctgagg | cacaagaatt | gcttgaaccc | gggagggtgga | 99060 |
| ggttgcagcg | agccgagatt | gcaccactgc | actccagcct | gggtgacaga | gcaagaccct | 99120 |
| gtctcaaaa | aacaaaacaa | aactcaaatt | ccacaatgaa | gttatatctt | tgaaaaaaca | 99180 |
| attttcaaat | aaaacatttc | attaaaaaga | ccagaaaaaa | caaccttaca | aagaaaaatc | 99240 |
| ctagcaagct | gtcatttgag | cagatctaaa | acctgccaa | ctcgaacagt | gatggcttcc | 99300 |
| tcagcaacga | aagatgattc | tgtttgggta | cctgatccac | cagaggcatc | atcaaggctc | 99360 |
| ctgctctctc | tttacttata | aaatgctggg | tatcaaaaag | gaagattttg | tataaacagt | 99420 |
| tcaaaaataa | ctgcaacagc | aagcagcact | tttcagggtc | attttcagag | tcaaaaaatg | 99480 |
| cttcatctgt | agacgtggga | agagtaaaaa | tgaaaaaaca | ctgaacttaa | ccatttaact | 99540 |
| tccaatgttt | acattgaaat | cactattaaa | ataactaaat | cagaagagtc | taaaatgata | 99600 |
| tagaaatcat | aatcaggacg | aaggcagaac | acaatggatg | gtctctcgaa | gaatgattcc | 99660 |
| ttctttttaga | gttaagattc | taacactcac | tctggcaagt | taaattccct | caactgtcaa | 99720 |
| gtgggtcagc | tatttagcatt | agagaataaa | ctaactctta | tttttgcggt | ttaaagttac | 99780 |
| ttccagtaac | tgacagtaac | ggccattttac | tttattcttt | ctcccaagtg | aggtgactta | 99840 |
| taacattcgc | tcatcatgct | aaaacaacac | ttcactgtct | gacaacaatg | aagtaaaaaa | 99900 |
| ttcaccctcc | ttagcttagg | acttaagaac | ctctaaaatc | ttgcttccaa | gcactagctt | 99960 |
| gtgtcttact | ggtaccttgt | ataaggcaca | caggacaagg | gtgacagctg | aactgaagcg | 100020 |
| accacccacc | tgttttgagg | atgttcacct | ggtccaagg | gtcagcaaaa | ggcttcacta | 100080 |
| agtggccggc | aaacagagta | aaaagccctt | tcagcttttc | agcaatgcaa | tctgccaaat | 100140 |
| tgtaaaatgt | caacaacctg | tcctttgggg | catcttctgt | tttagcccaa | tcaaacagct | 100200 |
| gaaaggataa | gacagtatta | gtttcttctga | catcttgtca | cttaaatctg | agcacaaaag | 100260 |
| agaggaagag | gaagaaagcg | tcaccttgaa | gaacaggggc | ctgaatgtga | cctcggaag | 100320 |
| tttgacaacc | atggctacta | gacagtcaat | gatacaattt | tccgtttttc | caacttcctc | 100380 |
| cagatcggtc | tgaaaacaga | agagcccat | tattagagtg | ctgataacctg | actgtaaatt | 100440 |
| attttggaac | gtaccactgt | tacacggcta | gattgttctc | ggactcttca | ataggtggat | 100500 |
| aacagcttta | ggatttggag | gagtgaaact | gagcttacct | cagagtgtctg | ggctcggaag | 100560 |
| tccagggcct | ccaggaaaaa | ggcgggttagc | tgagactgat | gggagggtgag | ctcttccctc | 100620 |
| ttcatcgccc | caatatgctc | ttgcaagatg | ctcataaacg | gacccatgtg | attctaccaa | 100680 |
| taacacagga | aaaagatgtg | ccattttcaa | atgattccta | gagttcagcg | gtgtgtattt | 100740 |
| ttaaaaacta | aatcttcttc | tttaagtcaa | agtttacaca | ttgcagtacc | acctctccct | 100800 |
| tctccaaagt | cttaataccc | aataagatct | aaccttccag | ttcttctcaa | tctgcttgta | 100860 |
| agtttttttg | atggcgggca | acaggactcg | gggtgcaagt | gtggtagcca | gtgtcttttt | 100920 |
| aagagatgtg | agacggatat | tagcctgtga | cgcagaaccc | atcttactag | tgattttctc | 100980 |
| cagatgaatc | acctacagga | atataaaaaa | agtgatcagg | gccactgcag | atcttcgctg | 101040 |
| acaaacacac | acttacagag | aggcttcatg | atgaggtact | agtgtttgga | aaatgcttag | 101100 |
| cactttttta | ctacacacag | agttcctttt | aaagtcagcc | ctaaacgtca | gtggataaaa | 101160 |
| ctgggcagac | acctcttgcc | caacttgcca | tcagggacga | aggccgatgg | tagacgcaga | 101220 |
| cgcacacaca | gcacccagac | agatgatttt | cttagaggac | aggaatgcaa | gggaccacgg | 101280 |
| caagagtcaa | gttgctaaaa | aactgagaaa | gtccttcaga | gcacaggccc | ctttctctga | 101340 |
| gaaggctact | tttaaaccct | ggctgtggtg | taagtgaagc | ggtttaatca | tttgcccat | 101400 |

| | | | | | | |
|------------|-------------|-------------|-------------|-------------|-------------|--------|
| ggtaatgaag | gctcctaacc | ttgtaaatgg | caaatagatca | acacaatgga | acagccaggt | 101460 |
| ctcaacactc | ttgagcatct | tcaatcataa | ataccactgg | cccctagcgt | gttgacagga | 101520 |
| aaccgctgac | gtgcaatata | aaaattctgc | tttgcaagat | gccttaggat | taaacctctc | 101580 |
| acagtagaaa | cagggcccat | caatttccac | aagtaataaa | aggcggtctc | accagcccaa | 101640 |
| ctccaaagat | ctcacagaag | aaaaaaaaagc | cagaatacat | tccgcacaat | taaagaagag | 101700 |
| aagcatctcg | ctaaaaagtg | acccccatat | caatttcaag | attaagtggc | aaggatgatg | 101760 |
| gaagagaaaa | agtacacatt | taataaaaagc | aagcacatct | cttcagaaat | aagactcctt | 101820 |
| tctgtcaaac | ggaaactaac | ccttaaagaa | aaaacaaaat | cactacattt | gtgatctttt | 101880 |
| accttcccc | gccaccctgc | gtagcatgtc | gtggctatcg | tggtcacct | gggagagaat | 101940 |
| gccttccaga | taggggctga | tgaagtgcgg | gagagtctcc | acaaccttct | gcagagcagc | 102000 |
| caaggcactg | agcaggtaga | cctcgctgga | gaccagctcg | ctgggtgttct | tcattgtttg | 102060 |
| cagcaacgat | ggcatcaggc | tagaaacaaa | gtaagagctt | tagaagaact | tgaagcagaa | 102120 |
| acagaggcta | gggaatggag | tagagggcat | tatgaaaaaa | accagcaaac | tgtgcctatt | 102180 |
| acatcgctat | ctgcctcata | gcctaaaaag | cagtgtctat | acattttatg | tggtctaaag | 102240 |
| caagaaatct | cccagtgtga | acagtatgga | cacaacagta | atttaaaaaa | taacaatgtc | 102300 |
| tttcattaac | tgaacactta | ctatgtgtca | ggcactatgc | aaaactcctt | gcaagcactg | 102360 |
| ccctacagaa | atcctatgag | gtagatactg | tctctgtttt | atagacagca | aagctctaac | 102420 |
| aggttaagga | acatactggc | tgtacagtaa | ggaactacca | cagccaggag | cttctaactt | 102480 |
| ccaaatttgg | cagcagaagg | cagctttggc | cttgccctaac | tgggtggggc | cctctgccaa | 102540 |
| gaaccttcac | ccactgcttt | ttgactatac | tagacaaaag | gaaggaagaa | tgaggagcga | 102600 |
| ttaacactgc | aaagcagtgc | atctgaagat | aaacgggaag | gctgcattct | tctgtttgaa | 102660 |
| gattaattat | ttttattatt | atttctttta | gagacagggt | ctcactctgt | tgcccaggct | 102720 |
| acagtgcagt | ggtgcagtca | tagctcactg | cagcctcaaa | ctcctggggt | caaatagatc | 102780 |
| ccctgccttg | gcctcccaaa | gtgctgggat | cacagccgtg | agccaccaca | ccctgcaaga | 102840 |
| tcaattcttt | aacaaattcc | aattttatgc | aacgtctact | cagaggaaaa | aaaaaaaaag | 102900 |
| tcaccaaagt | gttatttttc | aatgtgtgcc | aggcggtaac | agctcctgtt | ccaagtctcc | 102960 |
| ggccgcatac | ctgggaagct | gggggatggc | cagcgctccc | agggtggagg | tcacctctgc | 103020 |
| tatgcacagc | agcgcgcttc | ccaagacatt | cttctcctcc | tttctctctg | gagcaatcag | 103080 |
| tttcacagca | gtgctcagca | ctgggacaaa | aggatctgga | ttttctgcac | caaaattctt | 103140 |
| gcataaaagc | tttaaggtat | acaacgctgt | ctgtctgttg | attgcttggt | cttcttcccc | 103200 |
| ttcctttttc | ttacgttgca | caatggccaa | aaggctctgga | accagtttta | ggaaacgggt | 103260 |
| aacctgaagg | ggacagccag | aatccccaaa | tcattaaagc | tgcaaaaaat | gtttgtccat | 103320 |
| tttcccattg | tcacagcttg | agattgtcta | aatggaaatc | agactcgggg | gtcctgagtc | 103380 |
| acacagtcac | gctaagcgat | gtgcatgttc | tagccagtg | ttcacttata | caaagcaccc | 103440 |
| actgatctgg | agtaaaagg | acttagaact | atgctaaggc | taaggccacg | taagctctgt | 103500 |
| agtaagcaag | aattccacta | ggctgaaatt | ccattctaa | agctcttaca | acacacatat | 103560 |
| attcccgtta | gaattaacgt | cacattttta | aacatgtcat | ggtattatat | tcagataata | 103620 |
| atatacttca | atttgaaatt | gtaccactag | agaaattgaa | gggagttaaa | tgcagctctt | 103680 |
| tgataaaagc | aagtacagta | aatgggtgtg | tccctgggtc | tcactcacta | ttgtcttctt | 103740 |
| ccagatata | ttttgttgca | gcttgttatt | caaaaggctc | agcgctttgc | ggcgaacaga | 103800 |
| tggcagggga | ttgccacc | gccctctgat | cacaggaatg | aatgtctctg | tgggcagcaa | 103860 |
| ggcattgacc | taaagagaaa | ttttatat | aacatgaaaa | gaaaaacaaa | ttaaaaaaa | 103920 |
| aatcaacttc | aattaagaca | gactgctgtc | cactgcacac | ctccaggcac | caggcacttc | 103980 |
| cacacacatt | ttcttattta | attcttaaaa | taacctttca | ggtaggcatt | accaaccaca | 104040 |
| cattatcgaa | caaaacaaaa | gcctgatgtc | aggaggaagt | gccaaaggca | tgcagctaaa | 104100 |
| tgactgagct | agatttgaat | cagcaatcct | aacttcgagg | ccagtgatat | gtatgtaata | 104160 |
| tacttcatac | ttttattttta | ttccacttga | ataaagtaga | acagtatata | ttatatgact | 104220 |
| taattattaa | aatatacgag | gtacatgttc | tcataactgg | taaggaaaca | atTTTTTcca | 104280 |
| gacaaatcta | tttctagtca | tcaagagatt | gttttctaa | aaaaatctga | gcttcattat | 104340 |
| attcataaaa | ggaattgcta | agtttattct | taaaaacttt | acataatttc | acaataattt | 104400 |
| aaaaaacagc | aacaaaacag | taattccagg | gagaaatgaa | cacctacctt | atctaacagg | 104460 |
| tcgtaagctt | tactaaggag | cgcgcgccag | aacttcacgg | tgagtttgct | tgcgttcctt | 104520 |
| tccatggact | gtgcaactgc | actgatata | ccgagaacgg | tctccagcaa | cctgaaacac | 104580 |
| agaggctcgc | tcagcaaacg | gcagctgaag | aaactcagag | aacttggtca | tgtctacctt | 104640 |
| atgctaaatg | tttcaagtag | aaagacgagt | taaataattc | tgtactaaat | tattttcaaaa | 104700 |


```

actactcgga aagaaaggaa atgagggatt attgccatag acagagatca tcaagaagta 104760
actaggcgct tctgtgcaga agcatcgacc tcgctcagac tctgtgaggt gctgaataag 104820
caacagatgc tgaagcggtt taaggaaactc actcatatct agtcatgct cagtggatct 104880
cactgggctg tccaagtggg gtgttcaggg agttatggcc ctaggttaat ggcagggtgtg 104940
tgcgtgcaca cacacacagg cacacacacg cacacatata catgcacaca caccatacac 105000
catttatata aagagaaata ttaatagaaa tgaacatata acccacttct ttcacattat 105060
taggagacaa aaaaaaagac tacaaacttc aaataacttg taattagaaa agcacacacc 105120
aaattccaac acagctgcca ctggagatcc cccactgct gccagcctga ggggggagct 105180
agaggaaga gtggagacag aagttgacac cgcacagcag aggaggggag aagggggcgc 105240
agacaaaatc agctccaaaa acgaaagtcc tacgcatagc gctacaagtc agcccacagg 105300
actggaactc agcagctcac attcctggct gcagggcagg cactttccag tggaaagggc 105360
aggacagtgg ccctgggaat gccatgcac tgaaaaggag gtacacagca aggccaggag 105420
gcaaaccctg aggacatggg agagaaagga aaattcctgc acccaaatat ataatggcag 105480
catatggatt agaatccacg gaataaagaa ttcattgagcc catagaaatc agggccagat 105540
tgagacacta aacagatact gcaactcaat acaatacaca gacttgacat ggatcatgat 105600
gcagaaacac atgcggtgta aaggacagtg ttgggataat tagggagact ggagtatgaa 105660
ctgtagatta catcactgga ttggatcaat gttaaatttt ctgaatttga tcaatgtact 105720
gtggttttat aagaacatct cttattctta gagacataat gtatatgatt tactttcaaa 105780
tggctcagag aaaaaaccct acatagggag aacgctaagg caaatgtggc agaaagtatt 105840
atcaaatggt gaacctgggt gtaaagagta tatgaatttt ctgtactgtt tttccagggt 105900
ttctataagt ttgaagtcac ttccaaataa aaagtaaaaa aagaaaagga aacatacctc 105960
tcttcaaggc cttttaaaat ctcaggacca ccactctcaa ctacctaatt tttaaagaag 106020
acgtcattag aacggtatgg aagtcaataa taaaagtcac ttcaagtcag ttcaatgaaa 106080
ctcggaccat tcaactgaaac cttccacagc aactgttttc tgacattaca atttaatcag 106140
gttcatagca tcttcattat actgtagtaa ctctatttct ctttaatttat ttttaattata 106200
ttctactggt agtatctaaa aagtactaca atgggtcaga aaaatacagc aatcaacact 106260
caattagcac taccgaattc tatgacatgc tgatctgggt agctcacata tcctttgttg 106320
agaagttaaa cattacagat tcagctggaa tcccccaagt actgctcctt ggtcctattc 106380
tcctctacc ccaagcccca caaacaaaac catcatccca aatctgcttc caaatgtttc 106440
aaacactaca tatcacggaa caacatgttt ttctggaaac atatttttga gatctatgca 106500
tggtgactta tgttctagtt ccttcatttt aactgcata gatattcctc tataaatacc 106560
acttatctat ccatgtgcct ctgttggttag atgttttagt tatgtccatt ttttcccctt 106620
ttactaataa tgctagagaa gaacattttt atgtcccttt gatcatcttg ggaagttttt 106680
acagcatata tacctaagga agggaatgac cagatcacag gaattactgg aactttcaac 106740
ctcatg                                     106746

```

<210> 2

<211> 5408

<212> DNA

<213> Homo sapiens

<220>

<221> CDS

<222> 201..1151

<221> polyA_signal

<222> 1773..1778

<223> AATAAA

<221> polyA_signal

<222> 3624..3629

<223> AATAAA

<221> polyA_signal

<222> 3828..3833

<223> AATAAA

<221> polyA_signal

<222> 5119..5124

<223> AATAAA

<221> polyA_signal

<222> 5381..5386

<223> AATAAA

<221> polyA_signal

<222> 5386..5391

<223> AATAAA

<221> allele

<222> 176

<223> 5-1-222 : polymorphic base A or G

<221> allele

<222> 253

<223> 5-2-162 : polymorphic base A or T

<221> allele

<222> 269

<223> 5-2-178 : polymorphic base C or T

<221> allele

<222> 303

<223> 5-2-213 : polymorphic base C or T

<221> allele

<222> 362

<223> 5-3-83 : polymorphic base C or T

<221> allele

<222> 363

<223> 5-3-84 : polymorphic base A or G

<221> allele

<222> 527

<223> 5-3-248 : polymorphic base A or G

<221> allele

<222> 749

<223> 5-7-195 : polymorphic base G or C

<221> allele

<222> 1013

<223> 5-10-39 : polymorphic base C or T

<221> allele

<222> 1276

<223> 5-10-302 : polymorphic base A or G

<221> allele
<222> 1308
<223> 5-10-334 : polymorphic base A or C

<221> allele
<222> 1500
<223> 5-11-158 : polymorphic base A or G

<221> allele
<222> 1572
<223> 5-11-230 : polymorphic base G or T

<221> allele
<222> 1576
<223> 5-11-234 : polymorphic base C or T

<221> allele
<222> 1641
<223> 5-11-299 : polymorphic base A or T

<221> allele
<222> 1646
<223> 5-11-304 : polymorphic base A or C

<221> allele
<222> 1671
<223> 5-11-329 : polymorphic base C or T

<221> allele
<222> 1768
<223> 5-12-56 : polymorphic base insertion of CTTT

<221> allele
<222> 1979
<223> 5-12-267 : polymorphic base A or C

<221> allele
<222> 2156
<223> 5-13-145 : polymorphic base C or T

<221> allele
<222> 2423
<223> 5-14-44 : polymorphic base C or T

<221> allele
<222> 2471
<223> 5-14-93 : polymorphic base A or T

<221> allele
<222> 2522
<223> 5-14-144 : polymorphic base insertion of T

<221> allele
<222> 2543
<223> 5-14-165 : polymorphic base C or T

<221> allele
<222> 2675
<223> 5-14-297 : polymorphic base A or C

<221> allele
<222> 2685
<223> 5-14-307 : polymorphic base G or T

<221> allele
<222> 2973
<223> 5-15-219 : polymorphic base A or T

<221> allele
<222> 3242
<223> 5-16-157 : polymorphic base A or G

<221> allele
<222> 3514
<223> 5-17-140 : polymorphic base A or G

<221> allele
<222> 3593
<223> 5-18-51 : polymorphic base G or T

<221> allele
<222> 3750
<223> 5-18-208 : polymorphic base A or C

<221> allele
<222> 4023
<223> 5-300-238 : polymorphic base C or T

<221> allele
<222> 4072
<223> 5-300-287 : polymorphic base A or G

<221> allele
<222> 4398
<223> 5-262-49 : polymorphic base insertion of C

<221> allele
<222> 4434
<223> 5-262-85 : polymorphic base C or T

<221> allele
<222> 4603
<223> 5-262-254 : polymorphic base C or T

<221> allele
<222> 5204
<223> 5-263-404 : polymorphic base C or T

<221> allele
<222> 5397

<223> 5-265-244 : polymorphic base A or G

<221> misc_feature
<222> 708
<223> diverging nucleotide G in reference genbank : L78132

<221> misc_feature
<222> 709
<223> diverging nucleotide T in reference genbank : L78132

<221> misc_feature
<222> 807
<223> diverging nucleotide C in reference genbank : L78132

<221> misc_feature
<222> 1230
<223> insertion of G in reference genbank : L78132

<221> misc_feature
<222> 1493
<223> diverging nucleotide T in reference genbank : L78132

<221> misc_feature
<222> 1724
<223> diverging nucleotide G in reference genbank : L78132

<221> misc_feature
<222> 1845
<223> diverging nucleotide C in reference genbank : L78132

<221> misc_feature
<222> 1933
<223> diverging nucleotide C in reference genbank : L78132

<221> misc_feature
<222> 1934
<223> diverging nucleotide C in reference genbank : L78132

<221> misc_feature
<222> 1935
<223> diverging nucleotide C in reference genbank : L78132

<221> misc_feature
<222> 1936
<223> diverging nucleotide G in reference genbank : L78132

<221> misc_feature
<222> 1965
<223> deletion of A in reference genbank : L78132

<221> misc_feature
<222> 1981
<223> diverging nucleotide C in reference genbank : L78132

<221> misc_feature

<222> 2000
<223> diverging nucleotide T in reference genbank : L78132

<221> misc_feature
<222> 2014
<223> diverging nucleotide C in reference genbank : L78132

<221> misc_feature
<222> 2404
<223> deletion of TTA in reference genbank : L78132

<221> misc_feature
<222> 2407
<223> diverging nucleotide C in reference genbank : L78132

<221> misc_feature
<222> 2494
<223> insertion of G in reference genbank : L78132

<221> misc_feature
<222> 2683
<223> diverging nucleotide C in reference genbank : L78132

<221> misc_feature
<222> 3024
<223> insertion of A in reference genbank : L78132

<221> misc_feature
<222> 3058
<223> insertion of T in reference genbank : L78132

<221> misc_feature
<222> 3374
<223> deletion of AG in reference genbank : L78132

<221> misc_feature
<222> 3379
<223> diverging nucleotide A in reference genbank : L78132

<221> misc_feature
<222> 3383
<223> deletion of G in reference genbank : L78132

<221> misc_feature
<222> 3387
<223> deletion of G in reference genbank : L78132

<221> misc_feature
<222> 3402
<223> deletion of A in reference genbank : L78132

<221> misc_feature
<222> 3408
<223> deletion of A in reference genbank : L78132

<221> misc_feature
 <222> 3427
 <223> deletion of AA in reference genbank : L78132

<221> misc_feature
 <222> 3621
 <223> deletion of A in reference genbank : L78132

<221> misc_feature
 <222> 3664
 <223> deletion of C in reference genbank : L78132

<221> misc_feature
 <222> 3672
 <223> deletion of C in reference genbank : L78132

<221> misc_feature
 <222> 3684
 <223> insertion of TG in reference genbank : L78132

<221> misc_feature
 <222> 3688
 <223> insertion of C in reference genbank : L78132

<221> misc_feature
 <222> 3697
 <223> diverging nucleotide G in reference genbank : L78132

<221> misc_feature
 <222> 3698
 <223> diverging nucleotide C in reference genbank : L78132

<221> misc_feature
 <222> 3787
 <223> insertion of A in reference genbank : L78132

<221> misc_feature
 <222> 3931
 <223> insertion of G in reference genbank : L78132

```
<400> 2
agccgcccac ggacgccaga gccgggaacc ctgacggcac ttagctgctg acaaacaacc      60
tgctccgtgg agcgctgaa acaccagtct ttggggccag tgcctcagtt tcaatccagg      120
taacctttaa atgaaacttg cctaaaatct taggtcatac acagaagaga ctccaatcga      180
caagaagctg gaaaagaatg atg ttg tcc tta aac aac cta cag aat atc atc      233
                        Met Leu Ser Leu Asn Asn Leu Gln Asn Ile Ile
                        1             5             10
tat aac ccg gta atc ccg tat gtt ggc acc att ccc gat cag ctg gat      281
Tyr Asn Pro Val Ile Pro Tyr Val Gly Thr Ile Pro Asp Gln Leu Asp
                        15             20             25
cct gga act ttg att gtg ata tgt ggg cat gtt cct agt gac gca gac      329
Pro Gly Thr Leu Ile Val Ile Cys Gly His Val Pro Ser Asp Ala Asp
                        30             35             40
aga ttc cag gtg gat ctg cag aat ggc agc agt gtg aaa cct cga gcc      377
Arg Phe Gln Val Asp Leu Gln Asn Gly Ser Ser Val Lys Pro Arg Ala
```

| | | | |
|---|-----|-----|------|
| 45 | 50 | 55 | |
| gat gtg gcc ttt cat ttc aat cct cgt ttc aaa agg gcc ggc tgc att | | | 425 |
| Asp Val Ala Phe His Phe Asn Pro Arg Phe Lys Arg Ala Gly Cys Ile | | | |
| 60 | 65 | 70 | 75 |
| ggt tgc aat act ttg ata aat gaa aaa tgg gga cgg gaa gag atc acc | | | 473 |
| Val Cys Asn Thr Leu Ile Asn Glu Lys Trp Gly Arg Glu Glu Ile Thr | | | |
| 80 | 85 | 90 | |
| tat gac acg cct ttc aaa aga gaa aag tct ttt gag atc gtg att atg | | | 521 |
| Tyr Asp Thr Pro Phe Lys Arg Glu Lys Ser Phe Glu Ile Val Ile Met | | | |
| 95 | 100 | 105 | |
| gtg cta aag gac aaa ttc cag gtg gct gta aat gga aaa cat act ctg | | | 569 |
| Val Leu Lys Asp Lys Phe Gln Val Ala Val Asn Gly Lys His Thr Leu | | | |
| 110 | 115 | 120 | |
| ctc tat ggc cac agg atc ggc cca gag aaa ata gac act ctg ggc att | | | 617 |
| Leu Tyr Gly His Arg Ile Gly Pro Glu Lys Ile Asp Thr Leu Gly Ile | | | |
| 125 | 130 | 135 | |
| tat ggc aaa gtg aat att cac tca att ggt ttt agc ttc agc tcg gac | | | 665 |
| Tyr Gly Lys Val Asn Ile His Ser Ile Gly Phe Ser Phe Ser Ser Asp | | | |
| 140 | 145 | 150 | 155 |
| tta caa agt acc caa gca tct agt ctg gaa ctg aca gag ata agt aga | | | 713 |
| Leu Gln Ser Thr Gln Ala Ser Ser Leu Glu Leu Thr Glu Ile Ser Arg | | | |
| 160 | 165 | 170 | |
| gaa aat gtt cca aag tct ggc acg ccc cag ctt agc ctg cca ttc gct | | | 761 |
| Glu Asn Val Pro Lys Ser Gly Thr Pro Gln Leu Ser Leu Pro Phe Ala | | | |
| 175 | 180 | 185 | |
| gca agg ttg aac acc ccc atg ggc cct gga cga act gtc gtc gtt aaa | | | 809 |
| Ala Arg Leu Asn Thr Pro Met Gly Pro Gly Arg Thr Val Val Val Lys | | | |
| 190 | 195 | 200 | |
| gga gaa gtg aat gca aat gcc aaa agc ttt aat gtt gac cta cta gca | | | 857 |
| Gly Glu Val Asn Ala Asn Ala Lys Ser Phe Asn Val Asp Leu Leu Ala | | | |
| 205 | 210 | 215 | |
| gga aaa tca aag gat att gct cta cac ttg aac cca cgc ctg aat att | | | 905 |
| Gly Lys Ser Lys Asp Ile Ala Leu His Leu Asn Pro Arg Leu Asn Ile | | | |
| 220 | 225 | 230 | 235 |
| aaa gca ttt gta aga aat tct ttt ctt cag gag tcc tgg gga gaa gaa | | | 953 |
| Lys Ala Phe Val Arg Asn Ser Phe Leu Gln Glu Ser Trp Gly Glu Glu | | | |
| 240 | 245 | 250 | |
| gag aga aat att acc tct ttc cca ttt agt cct ggg atg tac ttt gag | | | 1001 |
| Glu Arg Asn Ile Thr Ser Phe Pro Phe Ser Pro Gly Met Tyr Phe Glu | | | |
| 255 | 260 | 265 | |
| atg ata att tac tgt gat gtt aga gaa ttc aag gtt gca gta aat ggc | | | 1049 |
| Met Ile Ile Tyr Cys Asp Val Arg Glu Phe Lys Val Ala Val Asn Gly | | | |
| 270 | 275 | 280 | |
| gta cac agc ctg gag tac aaa cac aga ttt aaa gag ctc agc agt att | | | 1097 |
| Val His Ser Leu Glu Tyr Lys His Arg Phe Lys Glu Leu Ser Ser Ile | | | |
| 285 | 290 | 295 | |
| gac acg ctg gaa att aat gga gac atc cac tta ctg gaa gta agg agc | | | 1145 |
| Asp Thr Leu Glu Ile Asn Gly Asp Ile His Leu Leu Glu Val Arg Ser | | | |
| 300 | 305 | 310 | 315 |
| tgg tag cctacctaca cagctgctac aaaaaccaa atacagaatg gcttctgtga | | | 1201 |
| Trp * | | | |
| tactggcctt gctgaaacgc atctcactgt cattctattg tttatattgt taaaatgagc | | | 1261 |
| ttgtgcacca ttagatcctg ctgggtgttc tcagtccttg ccatgaagta tgggtggtgc | | | 1321 |
| tagcactgaa tggggaaact gggggcagca acacttatag ccagttaaag ccactctgcc | | | 1381 |
| ctctctccta ctttggctga ctcttcaaga atgccattca acaagtattt atggagtacc | | | 1441 |

| | | | | | | |
|-------------|-------------|-------------|-------------|-------------|-------------|------|
| tactataata | cagtagctaa | catgtattga | gcacagattt | tttttggtaa | aactgtgagg | 1501 |
| agctaggata | tatacttggt | gaaacaaacc | agtatgttcc | ctgttctctt | gagcttcgac | 1561 |
| tcttctgtgc | tctattgctg | cgcactgctt | tttctacagg | cattacatca | actcctaagg | 1621 |
| ggctctctgg | gattagttaa | gcagctatta | aatcacccga | agacactaat | ttacagaaga | 1681 |
| cacaactcct | tccccagtga | tcactgtcat | aaccagtgtc | ctaccgtatc | ccatcactga | 1741 |
| ggactgatgt | tgactgacat | cattttatcg | taataaacat | gtggctctat | tagctgcaag | 1801 |
| ctttaccaag | taattggcat | gacatctgag | cacagaaatt | aaggcaaaaa | accaaagcaa | 1861 |
| aacaaataca | tgggtgctgaa | attaacttga | tgccaagccc | aaggcagctg | atcttctgtgt | 1921 |
| atltgaactt | agggcaaatc | agagtctaca | cagacgccta | cagaaagttt | caggaagagg | 1981 |
| caagatgcat | tcaatttgaa | agatatttat | gggcaacaaa | gtaagggtcag | gattagactt | 2041 |
| caggcattca | taaggcaggc | actatcagaa | agtgtacgcc | aactaaggga | cccacaaagc | 2101 |
| aggcagaggt | aatgcagaaa | tctgttttgt | tcccatgaaa | tcaccaatca | aggcctccgt | 2161 |
| tcttctaaag | attagtccat | catcatttag | aactgagatc | aaagcactct | tccactttac | 2221 |
| gtgattaaaa | tcaaacctgt | atcagcaagt | taaattggttc | catttctgtg | atttttctat | 2281 |
| tatttgaggg | gagttggcag | aagttccatg | tatatgggat | ctttacaggt | cagatcttgt | 2341 |
| tacaggaaat | ttcaaagggt | tgggagtggt | gagggaaaaa | agctcagtca | gtgaggatca | 2401 |
| ttttatcaca | ttagactggg | gcagaactct | gccaggattt | aggaatattt | tcagaacaga | 2461 |
| ttttagatat | tattttctatc | catatattga | aaagaatacc | attgtcaatc | ttattttttt | 2521 |
| aaaagtactc | agtgtagaaa | ttgctagccc | ttaattcttt | tccagctttt | catattaatg | 2581 |
| tatgcagagt | ctcaccaagc | tcaaagacac | tggttggggg | tggaggggtg | cacagggaaa | 2641 |
| gctgtagaag | gcaagaagac | tcgagaatcc | cccagagtta | tttttctcca | taaagaccat | 2701 |
| cagagtgtct | aactgagctg | ttggagactg | tgaggcattt | aggaaaaaaa | tagcccactc | 2761 |
| acatcattcc | ttgtaagtct | taagttcatt | ttcattttac | gtggaggaaa | aaaattttaa | 2821 |
| aagctattag | tattttattaa | tgaattttac | tgagacattt | cttagaaata | tgcacttcta | 2881 |
| tactagcaag | ctctgtctct | aaaatgcaag | ttggcctttt | gcttgccaca | tttctgcatt | 2941 |
| aaacttctat | attagcttca | aaggctttta | aactcaatgc | gaacattcta | cgggatgttc | 3001 |
| ttagatgcct | ttaaaaaggg | ggcagatcta | attttatattg | aaccctcact | ttccaacttc | 3061 |
| accatgaccc | agtactagag | attagggcac | ttcaaagcat | tgaaaaaaat | ctactgatac | 3121 |
| ttactttctt | agacaagtag | ttcttagtta | accaccaatg | gaactgggtt | cattctgaat | 3181 |
| cctggaggag | cttctcctgt | ccaccacagt | tttctgggcc | ctctgtgtga | gcagccaggt | 3241 |
| atgagctgtt | ttagaagcag | cgtgttgctt | tcactctctc | cgtttcccaa | aagaacaaag | 3301 |
| gataaagggt | acagtcacac | tcctgggtta | aaaaaagcat | tccagaacca | cttctcttta | 3361 |
| tgggcacac | aaagaaacga | aggctgaagt | tcgcctaccc | aaaatgaaaa | gtaggcttta | 3421 |
| cagtcaaaaag | tacttctgtt | gattgtctaaa | taacttcatt | ttcttgaaat | agagcaactt | 3481 |
| tgagtgaat | ctgcaacatg | gataccatgt | atataagata | ctgctgtaca | gaagagttaa | 3541 |
| ggcttacagt | gcaaatgagg | cgtcagcttt | gggtgctaaa | attaacaagt | ctaataattat | 3601 |
| taccatcaat | caggaagaga | ataataaatg | tttaaacaaa | cacagcagtc | tgtataaaaa | 3661 |
| taccgtgtat | cattttactct | ttctgcagct | ctatacgata | ggcaggagag | gcttatgtgg | 3721 |
| cagcacaagc | caggtgggga | ttttgtaacg | aagtgtataa | acatttgtaa | gtaatccaag | 3781 |
| taggtgtatt | aaggcaccaa | aagtaacatg | gcacccaaca | cccaaaaata | aaaatatgaa | 3841 |
| atatgagtgt | gaactctgag | tagagtatga | aacaccacag | aaagtcttag | aaatagctct | 3901 |
| ggagtgggtc | tcccaggaca | gtttccagtt | gctgaatagt | cttttggcac | tgatgttcta | 3961 |
| cttcttcaca | ttcatctaaa | aaaaaaaaaa | aaaaaaatca | aaattaaaaat | ctgagtcagt | 4021 |
| ctgcctgcct | cggttctcat | tagtttaatt | cttaatgcct | tgcactttcc | agcaatcatt | 4081 |
| caatcaaaaag | agtgaatga | agcacattaa | caaagcagga | ggcgccacgg | accgcctccc | 4141 |
| tccacaccgc | tccttccgcc | ttcattccct | gccacacagg | ttgcaactgga | agctgaataa | 4201 |
| gaatccccaa | aactcaaact | tcctagggat | gccacccctt | tagtagctca | cacctcccc | 4261 |
| ctccaagagc | taagaaacaa | aggagaatgt | actttttag | cttagataag | caatgaatca | 4321 |
| gtaaaggact | gatctacttg | ctccaccacc | cctcccttaa | taataacatt | tactgttatt | 4381 |
| tcctgggcct | aagacttatg | ttccagaact | gtcacagctc | cccatgtcac | accactagc | 4441 |
| ttgtgatctt | tgtcaataaa | ctgaaatctt | ttaagcctct | agtttcttcc | tttgtaaaac | 4501 |
| agagataaaa | tgttgtgggt | tttaagttag | ataatccaag | taaagcacct | aacatggagt | 4561 |
| agtgaatgaa | catcggttgc | tactaaaagt | ggacatccta | ccgcacctct | aatgccacta | 4621 |
| ggcattttcca | tacaatctgg | ggaccaaacc | ttcaatcata | taaattgtatg | agggttaatta | 4681 |
| aaaacactac | tgtaatctgc | ttgtatgatc | acaaaccacc | acaaaagaaa | agatcgtgaa | 4741 |

```

gattacactg taaacggact ctcaaatgat caggaggtgg tcacttcgca acttgctccc 4801
tccacccaac tcaaaacagg agctcgagcc tgcctgtatt tgagactgga gctgcctgta 4861
tgaggactgg atcaactgct agtcacgtta tatccaaatc tgcattatca ttgggcacat 4921
tttcacagaa ttttactgaa ttattcctta attgtttaat ggttgggaat agtttgggaa 4981
ttaccttcca tcaactctgc taagaaagga atggattctg gtagcaagac aatataattc 5041
tccttttagtt tttcagccag tgctaacaca gtaatcaaag cagcaaatcg aacctgaaag 5101
ggataaaaga gcaaagaaat aaaaagtagt gttactgtat ttattatctt aagagctgta 5161
ctgacttgag acaagctcta actttttaaa cattagtcca cacgcgttta ttcacttcac 5221
tatgttcatt aagctttcat cttagaatac cagtttcacc atttgggagc tgtttgtaat 5281
atgtgcaacc ttataaatag tgttttccaa actgtgtccc aggactgcaa atctttaatg 5341
tgaaatgtct ttttataatc tcttccttta aaaaaaacca ataaaataaa atgccacatg 5401
caaactc 5408

```

```

<210> 3
<211> 5534
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc_feature
<222> 201..203
<223> ATG

```

```

<221> misc_feature
<222> 1275..1277
<223> stop :TAG

```

```

<221> polyA_signal
<222> 1899..1904
<223> AATAAA

```

```

<221> polyA_signal
<222> 3750..3755
<223> AATAAA

```

```

<221> polyA_signal
<222> 3954..3959
<223> AATAAA

```

```

<221> polyA_signal
<222> 5245..5250
<223> AATAAA

```

```

<221> polyA_signal
<222> 5507..5512
<223> AATAAA

```

```

<221> polyA_signal
<222> 5512..5517
<223> AATAAA

```

```

<221> allele
<222> 176
<223> 5-1-222 : polymorphic base A or G

```

<221> allele
<222> 253
<223> 5-2-162 : polymorphic base A or T

<221> allele
<222> 269
<223> 5-2-178 : polymorphic base C or T

<221> allele
<222> 303
<223> 5-2-213 : polymorphic base C or T

<221> allele
<222> 362
<223> 5-3-83 : polymorphic base C or T

<221> allele
<222> 363
<223> 5-3-84 : polymorphic base A or G

<221> allele
<222> 527
<223> 5-3-248 : polymorphic base A or G

<221> allele
<222> 810
<223> 5-202-95 : polymorphic base G or T

<221> allele
<222> 832
<223> 5-202-117 : polymorphic base A or T

<221> allele
<222> 875
<223> 5-7-195 : polymorphic base G or C

<221> allele
<222> 1139
<223> 5-10-39 : polymorphic base C or T

<221> allele
<222> 1402
<223> 5-10-302 : polymorphic base A or G

<221> allele
<222> 1434
<223> 5-10-334 : polymorphic base A or C

<221> allele
<222> 1626
<223> 5-11-158 : polymorphic base A or G

<221> allele
<222> 1698

<223> 5-11-230 : polymorphic base G or T

<221> allele
<222> 1702
<223> 5-11-234 : polymorphic base C or T

<221> allele
<222> 1767
<223> 5-11-299 : polymorphic base A or T

<221> allele
<222> 1772
<223> 5-11-304 : polymorphic base A or C

<221> allele
<222> 1797
<223> 5-11-329 : polymorphic base C or T

<221> allele
<222> 1894
<223> 5-12-56 : polymorphic base insertion of CTTT

<221> allele
<222> 2105
<223> 5-12-267 : polymorphic base A or C

<221> allele
<222> 2282
<223> 5-13-145 : polymorphic base C or T

<221> allele
<222> 2549
<223> 5-14-44 : polymorphic base C or T

<221> allele
<222> 2597
<223> 5-14-93 : polymorphic base A or T

<221> allele
<222> 2648
<223> 5-14-144 : polymorphic base insertion of T

<221> allele
<222> 2669
<223> 5-14-165 : polymorphic base C or T

<221> allele
<222> 2801
<223> 5-14-297 : polymorphic base A or C

<221> allele
<222> 2811
<223> 5-14-307 : polymorphic base G or T

<221> allele

<222> 3099
<223> 5-15-219 : polymorphic base A or T

<221> allele
<222> 3368
<223> 5-16-157 : polymorphic base A or G

<221> allele
<222> 3640
<223> 5-17-140 : polymorphic base A or G

<221> allele
<222> 3719
<223> 5-18-51 : polymorphic base G or T

<221> allele
<222> 3876
<223> 5-18-208 : polymorphic base A or C

<221> allele
<222> 4149
<223> 5-300-238 : polymorphic base C or T

<221> allele
<222> 4198
<223> 5-300-287 : polymorphic base A or G

<221> allele
<222> 4524
<223> 5-262-49 : polymorphic base insertion of C

<221> allele
<222> 4560
<223> 5-262-85 : polymorphic base C or T

<221> allele
<222> 4729
<223> 5-262-254 : polymorphic base C or T

<221> allele
<222> 5330
<223> 5-263-404 : polymorphic base C or T

<221> allele
<222> 5523
<223> 5-265-244 : polymorphic base A or G

<221> misc_feature
<222> 708
<223> diverging nucleotide G in reference genbank : L78132

<221> misc_feature
<222> 709
<223> diverging nucleotide T in reference genbank : L78132

<221> misc_feature
<222> 807
<223> diverging nucleotide C in reference genbank : L78132

<221> misc_feature
<222> 1356
<223> isertion G in reference genbank : L78132

<221> misc_feature
<222> 1619
<223> diverging nucleotide T in reference genbank : L78132

<221> misc_feature
<222> 1850
<223> diverging nucleotide G in reference genbank : L78132

<221> misc_feature
<222> 1971
<223> diverging nucleotide C in reference genbank : L78132

<221> misc_feature
<222> 2059
<223> diverging nucleotide C in reference genbank : L78132

<221> misc_feature
<222> 2060
<223> diverging nucleotide C in reference genbank : L78132

<221> misc_feature
<222> 2061
<223> diverging nucleotide C in reference genbank : L78132

<221> misc_feature
<222> 2062
<223> diverging nucleotide G in reference genbank : L78132

<221> misc_feature
<222> 2091
<223> deletion A in reference genbank : L78132

<221> misc_feature
<222> 2107
<223> diverging nucleotide C in reference genbank : L78132

<221> misc_feature
<222> 2126
<223> diverging nucleotide T in reference genbank : L78132

<221> misc_feature
<222> 2140
<223> diverging nucleotide C in reference genbank : L78132

<221> misc_feature
<222> 2530
<223> deletion TTA in reference genbank : L78132

<221> misc_feature
<222> 2533
<223> diverging nucleotide C in reference genbank : L78132

<221> misc_feature
<222> 2620
<223> isertion G in reference genbank : L78132

<221> misc_feature
<222> 2809
<223> diverging nucleotide C in reference genbank : L78132

<221> misc_feature
<222> 3150
<223> isertion A in reference genbank : L78132

<221> misc_feature
<222> 3184
<223> isertion T in reference genbank : L78132

<221> misc_feature
<222> 3500
<223> deletion AG in reference genbank : L78132

<221> misc_feature
<222> 3505
<223> diverging nucleotide A in reference genbank : L78132

<221> misc_feature
<222> 3509
<223> deletion G in reference genbank : L78132

<221> misc_feature
<222> 3513
<223> deletion G in reference genbank : L78132

<221> misc_feature
<222> 3528
<223> deletion A in reference genbank : L78132

<221> misc_feature
<222> 3534
<223> deletion A in reference genbank : L78132

<221> misc_feature
<222> 3553
<223> deletion AA in reference genbank : L78132

<221> misc_feature
<222> 3747
<223> deletion A in reference genbank : L78132

<221> misc_feature
<222> 3790

<223> deletion C in reference genbank : L78132

<221> misc_feature

<222> 3798

<223> deletion C in reference genbank : L78132

<221> misc_feature

<222> 3810

<223> isertion TG in reference genbank : L78132

<221> misc_feature

<222> 3814

<223> isertion C in reference genbank : L78132

<221> misc_feature

<222> 3823

<223> diverging nucleotide G in reference genbank : L78132

<221> misc_feature

<222> 3824

<223> diverging nucleotide C in reference genbank : L78132

<221> misc_feature

<222> 3913

<223> isertion A in reference genbank : L78132

<221> misc_feature

<222> 4057

<223> isertion G in reference genbank : L78132

<400> 3

```

agccgcccac ggacgccaga gccgggaacc ctgacggcac ttagctgctg acaaacaacc      60
tgctccgtgg agcgccctgaa acaccagtct ttggggccag tgcctcagtt tcaatccagg      120
taacctttaa atgaaacttg cctaaaatct taggtcatat acagaagaga ctccaatcga      180
caagaagctg gaaaagaatg atg ttg tcc tta aac aac cta cag aat atc atc      233
                    Met Leu Ser Leu Asn Asn Leu Gln Asn Ile Ile
                        1             5             10
tat aac ccg gta atc ccg tat gtt ggc acc att ccc gat cag ctg gat      281
Tyr Asn Pro Val Ile Pro Tyr Val Gly Thr Ile Pro Asp Gln Leu Asp
                    15             20             25
cct gga act ttg att gtg ata tgt ggg cat gtt cct agt gac gca gac      329
Pro Gly Thr Leu Ile Val Ile Cys Gly His Val Pro Ser Asp Ala Asp
                    30             35             40
aga ttc cag gtg gat ctg cag aat ggc agc agt gtg aaa cct cga gcc      377
Arg Phe Gln Val Asp Leu Gln Asn Gly Ser Ser Val Lys Pro Arg Ala
                    45             50             55
gat gtg gcc ttt cat ttc aat cct cgt ttc aaa agg gcc ggc tgc att      425
Asp Val Ala Phe His Phe Asn Pro Arg Phe Lys Arg Ala Gly Cys Ile
                    60             65             70             75
gtt tgc aat act ttg ata aat gaa aaa tgg gga cgg gaa gag atc acc      473
Val Cys Asn Thr Leu Ile Asn Glu Lys Trp Gly Arg Glu Glu Ile Thr
                    80             85             90
tat gac acg cct ttc aaa aga gaa aag tct ttt gag atc gtg att atg      521
Tyr Asp Thr Pro Phe Lys Arg Glu Lys Ser Phe Glu Ile Val Ile Met
                    95             100             105

```


| | |
|--|------|
| gtg cta aag gac aaa ttc cag gtg gct gta aat gga aaa cat act ctg | 569 |
| Val Leu Lys Asp Lys Phe Gln Val Ala Val Asn Gly Lys His Thr Leu | |
| 110 115 120 | |
| ctc tat ggc cac agg atc ggc cca gag aaa ata gac act ctg ggc att | 617 |
| Leu Tyr Gly His Arg Ile Gly Pro Glu Lys Ile Asp Thr Leu Gly Ile | |
| 125 130 135 | |
| tat ggc aaa gtg aat att cac tca att ggt ttt agc ttc agc tcg gac | 665 |
| Tyr Gly Lys Val Asn Ile His Ser Ile Gly Phe Ser Phe Ser Ser Asp | |
| 140 145 150 155 | |
| tta caa agt acc caa gca tct agt ctg gaa ctg aca gag ata agt aga | 713 |
| Leu Gln Ser Thr Gln Ala Ser Ser Leu Glu Leu Thr Glu Ile Ser Arg | |
| 160 165 170 | |
| gaa aat gtt cca aag tct ggc acg ccc cag ctt cct agt aat aga gga | 761 |
| Glu Asn Val Pro Lys Ser Gly Thr Pro Gln Leu Pro Ser Asn Arg Gly | |
| 175 180 185 | |
| gga gac att tct aaa atc gca ccc aga act gtc tac acc aag agc aaa | 809 |
| Gly Asp Ile Ser Lys Ile Ala Pro Arg Thr Val Tyr Thr Lys Ser Lys | |
| 190 195 200 | |
| gat tcg act gtc aat cac act ttg act tgc acc aaa ata cca cct atg | 857 |
| Asp Ser Thr Val Asn His Thr Leu Thr Cys Thr Lys Ile Pro Pro Met | |
| 205 210 215 | |
| aac tat gtg tca aag agc ctg cca ttc gct gca agg ttg aac acc ccc | 905 |
| Asn Tyr Val Ser Lys Ser Leu Pro Phe Ala Arg Leu Asn Thr Pro | |
| 220 225 230 235 | |
| atg ggc cct gga cga act gtc gtc gtt aaa gga gaa gtg aat gca aat | 953 |
| Met Gly Pro Gly Arg Thr Val Val Val Lys Gly Glu Val Asn Ala Asn | |
| 240 245 250 | |
| gcc aaa agc ttt aat gtt gac cta cta gca gga aaa tca aag gat att | 1001 |
| Ala Lys Ser Phe Asn Val Asp Leu Leu Ala Gly Lys Ser Lys Asp Ile | |
| 255 260 265 | |
| gct cta cac ttg aac cca cgc ctg aat att aaa gca ttt gta aga aat | 1049 |
| Ala Leu His Leu Asn Pro Arg Leu Asn Ile Lys Ala Phe Val Arg Asn | |
| 270 275 280 | |
| tct ttt ctt cag gag tcc tgg gga gaa gaa gag aga aat att acc tct | 1097 |
| Ser Phe Leu Gln Glu Ser Trp Gly Glu Glu Glu Arg Asn Ile Thr Ser | |
| 285 290 295 | |
| ttc cca ttt agt cct ggg atg tac ttt gag atg ata att tac tgt gat | 1145 |
| Phe Pro Phe Ser Pro Gly Met Tyr Phe Glu Met Ile Ile Tyr Cys Asp | |
| 300 305 310 315 | |
| gtt aga gaa ttc aag gtt gca gta aat ggc gta cac agc ctg gag tac | 1193 |
| Val Arg Glu Phe Lys Val Ala Val Asn Gly Val His Ser Leu Glu Tyr | |
| 320 325 330 | |
| aaa cac aga ttt aaa gag ctc agc agt att gac acg ctg gaa att aat | 1241 |
| Lys His Arg Phe Lys Glu Leu Ser Ser Ile Asp Thr Leu Glu Ile Asn | |
| 335 340 345 | |
| gga gac atc cac tta ctg gaa gta agg agc tgg tag cctacctaca | 1287 |
| Gly Asp Ile His Leu Leu Glu Val Arg Ser Trp * | |
| 350 355 | |
| cagctgctac aaaaacccaaa atacagaatg gcttctgtga tactggcctt gctgaaacgc | 1347 |
| atctcactgt cattctattg tttatattgt taaaatgagc ttgtgcacca ttagatcctg | 1407 |
| ctgggtgttc tcagtccttg ccatgaagta tgggtggtgtc tagcactgaa tggggaaact | 1467 |
| gggggcagca acacttatag ccagttaaag ccactctgcc ctctctccta ctttggtgta | 1527 |
| ctcttcaaga atgccattca acaagtattt atggagtacc tactataata cagtagctaa | 1587 |
| catgtattga gcacagattt tttttggtaa aactgtgagg agctaggata tatacttggg | 1647 |
| gaaacaaacc agtatgttcc ctgttctctt gagcttcgac tcttctgtgc tctattgctg | 1707 |

| | | | | | | |
|------------|------------|------------|-------------|-------------|------------|------|
| cgcactgctt | tttctacagg | cattacatca | actcctaagg | ggtcctctgg | gattagttaa | 1767 |
| gcagctatta | aatcacccga | agacactaat | ttacagaaga | cacaactcct | tccccagtga | 1827 |
| tcactgtcat | aaccagtgtc | ctaccgtatc | ccatcactga | ggactgatgt | tgactgacat | 1887 |
| cattttatcg | taataaacat | gtggctctat | tagctgcaag | ctttaccaag | taattggcat | 1947 |
| gacatctgag | cacagaaatt | aaggcaaaaa | accaaagcaa | aacaaataca | tggtgctgaa | 2007 |
| attaacttga | tgccaagccc | aaggcagctg | atttctgtgt | atttgaactt | agggcaaatc | 2067 |
| agagtctaca | cagacgccta | cagaaagttt | caggaagagg | caagatgcat | tcaatttgaa | 2127 |
| agatatttat | gggcaacaaa | gtaaggtcag | gattagactt | caggcattca | taaggcaggc | 2187 |
| actatcagaa | agtgtacgcc | aactaaggga | cccacaaagc | aggcagaggt | aatgcagaaa | 2247 |
| tctgttttgt | tcccatgaaa | tcaccaatca | aggcctccgt | tcttctaaag | attagtccat | 2307 |
| catcattagc | aactgagatc | aaagcactct | tccactttac | gtgattaaaa | tcaaacctgt | 2367 |
| atcagcaagt | taaatggttc | catttctgtg | atttttctat | tatttgaggg | gagttggcag | 2427 |
| aagttccatg | tatatgggat | ctttacaggt | cagatcttgt | tacaggaaat | ttcaaagggt | 2487 |
| tgggagtg | gagggaaaaa | agctcagtc | gtgaggatca | ttttatcaca | ttagactggg | 2547 |
| gcagaactct | gccaggat | aggaatattt | tcagaacaga | ttttagatat | tatttctatc | 2607 |
| catatattga | aaagaatacc | attgtcaatc | ttattttttt | aaaagtactc | agtgtagaaa | 2667 |
| ttgctagccc | ttaattcttt | tccagctttt | catattaatg | tatgcagagt | ctcaccaagc | 2727 |
| tcaaagacac | tggttggggg | tggaggggtg | cacagggaaa | gctgtagaag | gcaagaagac | 2787 |
| tcgagaatcc | cccagagtta | tttttctcca | taaagaccat | cagagtgtct | aactgagctg | 2847 |
| ttggagactg | tgaggcattt | aggaaaaaaa | tagcccactc | acatcattcc | ttgtaagtct | 2907 |
| taagttcatt | ttcattttac | gtggaggaaa | aaaatttaaa | aagctattag | tatttattaa | 2967 |
| tgaattttac | tgagacattt | cttagaataa | tgactttcta | tactagcaag | ctctgtctct | 3027 |
| aaaatgcaag | tgggcctttt | gcttgccaca | ttctgtcatt | aaacttctat | attagcttca | 3087 |
| aaggctttta | aactcaatgc | gaacattcta | cgggatgttc | ttagatgcct | ttaaaaaggg | 3147 |
| ggcagatcta | attttatttg | aacctcact | ttccaacttc | accatgaccc | agtactagag | 3207 |
| attagggcac | ttcaaagcat | tgaaaaaaat | ctactgatac | ttactttctt | agacaagtag | 3267 |
| ttcttagtta | accaccaatg | gaactgggtt | cattctgaat | cctggaggag | cttctcgtg | 3327 |
| ccaccagtg | tttctgggcc | ctctgtgtga | gcagccaggt | atgagctgtt | ttagaagcag | 3387 |
| cgtgttgcc | tcatctctcc | cgtttcccaa | agaacaaag | gataaagggtg | acagtcacac | 3447 |
| tcttgggtta | aaaaaagcat | tccagaacca | cttctcttta | tgggcacaa | aaagaaacga | 3507 |
| aggctgaagt | tcgcctaccc | aaaatgaaaa | gtaggcttta | cagtcaaaag | tacttctgtt | 3567 |
| gattgctaaa | taacttcatt | ttcttgaaat | agagcaactt | tgagtgaat | ctgcaacatg | 3627 |
| gataccatgt | atataagata | ctgctgtaca | gaagagttaa | ggcttacagt | gcaaatgagg | 3687 |
| cgtcagcttt | gggtgctaaa | attaacaagt | ctaataattat | taccatcaat | caggaagaga | 3747 |
| ataataaatg | tttaaacaaa | cacagcagtc | tgtataaaaa | taccgtgtat | catttactct | 3807 |
| ttctgcagct | ctatacgata | ggcaggagag | gcttatgtgg | cagcacaagc | caagtgggga | 3867 |
| ttttgtaacg | aagtgataaa | acatttgtaa | gtaatccaag | taggtgtatt | aaggcaccaa | 3927 |
| aagtaacatg | gcacccaaca | cccaaaaata | aaaatatgaa | atatgagtgt | gaactctgag | 3987 |
| tagagttaga | aacaccacag | aaagtcttag | aaatagctct | ggagtggctc | tcccaggaca | 4047 |
| gtttccagtt | gctgaatagt | cttttggc | tgatgttcta | cttcttcaca | ttcatctaaa | 4107 |
| aaaaaaaaaa | aaaaaaatca | aaattaaaat | ctgagtcagt | ctgcctgcct | cggttctcat | 4167 |
| tagtttaatt | cttaatgcct | tgcactttcc | agcaatcatt | caatcaaaag | agtgaatga | 4227 |
| agcacattaa | caaagcagga | ggcgccacgg | accgcctccc | tccacaccgc | tccttccgcc | 4287 |
| ttcattccct | gccacaggc | ttgcactgga | agctgaataa | gaatcccaa | aactcaaact | 4347 |
| tcctagggat | gccaccctt | tagtagctca | cacctcccc | ctccaagagc | taagaaacaa | 4407 |
| aggagaatgt | actttttag | cttagataag | caatgaatca | gtaaaggact | gatctacttg | 4467 |
| ctccaccacc | cctcccttaa | taataacatt | tactgttatt | tcctgggcct | aagacttatg | 4527 |
| ttccagaact | gtcacagctc | cccatgtcac | accactagc | ttgtgatctt | tgtcaataaa | 4587 |
| ctgaaatctt | ttaagcctct | agtttcttcc | tttgtaaaac | agagataaaa | tgttggtgtt | 4647 |
| tttaagttag | ataatccaag | taaagcacct | aacatggagt | agtgaatgaa | catcggttgc | 4707 |
| tactaaaagt | ggacatccta | ccgcacctt | aatgccacta | ggcatttcca | tacaatctgg | 4767 |
| ggacaaaaac | ttcaatcata | taaatgtatg | agggttaatta | aaaacactac | tgtaatctgc | 4827 |
| ttgtatgatc | acaaaccacc | acaaaagaaa | agatcgtgaa | gattacactg | taaacggact | 4887 |
| ctcaaatgat | caggaggtgg | tcacttcgca | acttgctccc | tccaccaaac | tcaaaacagg | 4947 |
| agctcgagcc | tgctgtatt | tgagactgga | gctgcctgta | tgaggactgg | atcaactgct | 5007 |

```

agtcacgtta tatccaaatc tgcattatca ttgggcacat tttcacagaa ttttactgaa 5067
ttattcctta attgtttaat gggttggaat agtttggaat ttacctcca tcaactctgc 5127
taagaaagga atggattctg gtagcaagac aatataattc tcctttagtt tttcagccag 5187
tgctaacaca gtaatcaaag cagcaaatcg aacctgaaag ggataaaaga gcaaagaaat 5247
aaaaagtagt gttactgtat ttattatctt aagagctgta ctgacttgag acaagctcta 5307
actttttaaa cattagttca cacgcgttta ttcacttcat tatgttcatt aagctttcat 5367
cttagaatac cagtttcacc atttgggagc tgtttgtaat atgtgcaacc ttataaatag 5427
tgttttccaa actgtgtccc aggactgcaa atctttaatg tgaaatgtct ttttataatc 5487
tcttccttta aaaaaaacca ataaaataaa atgccacatg caaactc 5534

```

```

<210> 4
<211> 2471
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc_feature
<222> 201..203
<223> ATG

```

```

<221> misc_feature
<222> 1305..1307
<223> stop :TAG

```

```

<221> polyA_signal
<222> 2182..2187
<223> AATAAA

```

```

<221> polyA_signal
<222> 2444..2449
<223> AATAAA

```

```

<221> polyA_signal
<222> 2449..2454
<223> AATAAA

```

```

<221> allele
<222> 176
<223> 5-1-222 : polymorphic base A or G

```

```

<221> allele
<222> 253
<223> 5-2-162 : polymorphic base A or T

```

```

<221> allele
<222> 269
<223> 5-2-178 : polymorphic base C or T

```

```

<221> allele
<222> 303
<223> 5-2-213 : polymorphic base C or T

```

```

<221> allele
<222> 362

```

<223> 5-3-83 : polymorphic base C or T

<221> allele
<222> 363
<223> 5-3-84 : polymorphic base A or G

<221> allele
<222> 527
<223> 5-3-248 : polymorphic base A or G

<221> allele
<222> 749
<223> 5-7-195 : polymorphic base G or C

<221> allele
<222> 1013
<223> 5-10-39 : polymorphic base C or T

<221> allele
<222> 1461
<223> 5-262-49 : polymorphic base insertion of C

<221> allele
<222> 1497
<223> 5-262-85 : polymorphic base C or T

<221> allele
<222> 1666
<223> 5-262-254 : polymorphic base C or T

<221> allele
<222> 2267
<223> 5-263-404 : polymorphic base C or T

<221> allele
<222> 2460
<223> 5-265-244 : polymorphic base A or G

<221> misc_feature
<222> 708
<223> diverging nucleotide G in reference genbank : L78132

<221> misc_feature
<222> 709
<223> diverging nucleotide T in reference genbank : L78132

<221> misc_feature
<222> 807
<223> diverging nucleotide C in reference genbank : L78132

<221> misc_feature
<222> 1013
<223> diverging nucleotide T in reference genbank : L78132

<400> 4

```

agccgcccac ggacgccaga gccgggaacc ctgacggcac ttagctgctg acaaacaacc      60
tgctccgtgg agcgccctgaa acaccagtct ttggggccag tgcctcagtt tcaatccagg      120
taacctttaa atgaaacttg cctaaaatct taggtcatac acagaagaga ctccaatcga      180
caagaagctg gaaaagaatg atg ttg tcc tta aac aac cta cag aat atc atc      233
                Met Leu Ser Leu Asn Asn Leu Gln Asn Ile Ile
                1                5                10
tat aac ccg gta atc ccg tat gtt ggc acc att ccc gat cag ctg gat      281
Tyr Asn Pro Val Ile Pro Tyr Val Gly Thr Ile Pro Asp Gln Leu Asp
                15                20                25
cct gga act ttg att gtg ata tgt ggg cat gtt cct agt gac gca gac      329
Pro Gly Thr Leu Ile Val Ile Cys Gly His Val Pro Ser Asp Ala Asp
                30                35                40
aga ttc cag gtg gat ctg cag aat ggc agc agt gtg aaa cct cga gcc      377
Arg Phe Gln Val Asp Leu Gln Asn Gly Ser Ser Val Lys Pro Arg Ala
                45                50                55
gat gtg gcc ttt cat ttc aat cct cgt ttc aaa agg gcc ggc tgc att      425
Asp Val Ala Phe His Phe Asn Pro Arg Phe Lys Arg Ala Gly Cys Ile
        60                65                70                75
gtt tgc aat act ttg ata aat gaa aaa tgg gga cgg gaa gag atc acc      473
Val Cys Asn Thr Leu Ile Asn Glu Lys Trp Gly Arg Glu Glu Ile Thr
                80                85                90
tat gac acg cct ttc aaa aga gaa aag tct ttt gag atc gtg att atg      521
Tyr Asp Thr Pro Phe Lys Arg Glu Lys Ser Phe Glu Ile Val Ile Met
                95                100                105
gtg cta aag gac aaa ttc cag gtg gct gta aat gga aaa cat act ctg      569
Val Leu Lys Asp Lys Phe Gln Val Ala Val Asn Gly Lys His Thr Leu
                110                115                120
ctc tat ggc cac agg atc ggc cca gag aaa ata gac act ctg ggc att      617
Leu Tyr Gly His Arg Ile Gly Pro Glu Lys Ile Asp Thr Leu Gly Ile
                125                130                135
tat ggc aaa gtg aat att cac tca att ggt ttt agc ttc agc tcg gac      665
Tyr Gly Lys Val Asn Ile His Ser Ile Gly Phe Ser Phe Ser Ser Asp
        140                145                150                155
tta caa agt acc caa gca tct agt ctg gaa ctg aca gag ata agt aga      713
Leu Gln Ser Thr Gln Ala Ser Ser Leu Glu Leu Thr Glu Ile Ser Arg
                160                165                170
gaa aat gtt cca aag tct ggc acg ccc cag ctt agc ctg cca ttc gct      761
Glu Asn Val Pro Lys Ser Gly Thr Pro Gln Leu Ser Leu Pro Phe Ala
                175                180                185
gca agg ttg aac acc ccc atg ggc cct gga cga act gtc gtc gtt aaa      809
Ala Arg Leu Asn Thr Pro Met Gly Pro Gly Arg Thr Val Val Val Lys
                190                195                200
gga gaa gtg aat gca aat gcc aaa agc ttt aat gtt gac cta cta gca      857
Gly Glu Val Asn Ala Asn Ala Lys Ser Phe Asn Val Asp Leu Leu Ala
                205                210                215
gga aaa tca aag gat att gct cta cac ttg aac cca cgc ctg aat att      905
Gly Lys Ser Lys Asp Ile Ala Leu His Leu Asn Pro Arg Leu Asn Ile
        220                225                230                235
aaa gca ttt gta aga aat tct ttt ctt cag gag tcc tgg gga gaa gaa      953
Lys Ala Phe Val Arg Asn Ser Phe Leu Gln Glu Ser Trp Gly Glu Glu
                240                245                250
gag aga aat att acc tct ttc cca ttt agt cct ggg atg tac ttt gag      1001
Glu Arg Asn Ile Thr Ser Phe Pro Phe Ser Pro Gly Met Tyr Phe Glu
                255                260                265
atg ata att tac tgt gat gtt aga gaa ttc aag gtt gca gta aat ggc      1049

```

```

Met Ile Ile Tyr Cys Asp Val Arg Glu Phe Lys Val Ala Val Asn Gly
      270      275      280
gta cac agc ctg gag tac aaa cac aga ttt aaa gag ctc agc agt att      1097
Val His Ser Leu Glu Tyr Lys His Arg Phe Lys Glu Leu Ser Ser Ile
      285      290      295
gac acg ctg gaa att aat gga gac atc cac tta ctg gaa caa tca ttc      1145
Asp Thr Leu Glu Ile Asn Gly Asp Ile His Leu Leu Glu Gln Ser Phe
      300      305      310      315
aat caa aag agt gaa atg aag cac att aac aaa gca gga ggc gcc acg      1193
Asn Gln Lys Ser Glu Met Lys His Ile Asn Lys Ala Gly Gly Ala Thr
      320      325      330
gac cgc ctc cct cca cac cgc tcc ttc cgc ctt cat tcc ttg ccc aca      1241
Asp Arg Leu Pro Pro His Arg Ser Phe Arg Leu His Ser Leu Pro Thr
      335      340      345
ggc ttg cac tgg aag ctg aat aag aat ccc caa aac tca aac ttc cta      1289
Gly Leu His Trp Lys Leu Asn Lys Asn Pro Gln Asn Ser Asn Phe Leu
      350      355      360
ggg atg cca ccc ctt tag tagctcacac ctccccctc caagagctaa      1337
Gly Met Pro Pro Leu *
      365
gaaacaaagg agaatgtact tttgtagctt agataagcaa tgaatcagta aaggactgat      1397
ctacttgctc caccacccct cccttaataa taacatttac tggtatttcc tgggcctaag      1457
acttatgttc cagaactgtc acagctcccc atgtcacacc cactagcttg tgatctttgt      1517
caaataactg aaatctttta agcctctagt ttcttccttt gtaaaacaga gataaaatgt      1577
tgtggttttt aagtgagata atccaagtaa agcacctaac atggagtagt gaatgaacat      1637
cggttgctac taaaagtggg catcctaccg catccttaat gccactaggc atttccatac      1697
aatctgggga caaaaacttc aatcatataa atgtatgagg ttaattaaaa acactactgt      1757
aatctgcttg tatgatcaca aaccaccaca aaagaaaaga tcgtgaagat tacactgtaa      1817
acggactctc aaatgatcag gaggtggtca cttcgcaact tgctccctcc acccaactca      1877
aaacaggagc tcgagcctgc ctgtatttga gactggagct gcctgtatga ggactggatc      1937
aactgctagt cacgttatat ccaaactctgc attatcattg ggcacatttt cacagaattt      1997
tactgaatta ttccttaatt gtttaatggt tgggaatagt ttgggaatta ccttccatca      2057
actctgctaa gaaaggaatg gattctggta gcaagacaat ataattctcc tttagttttt      2117
cagccagtgc taacacagta atcaaagcag caaatcgaac ctgaaaggga taaaagagca      2177
aagaaataaa aagtagtggt actgtattta ttatcttaag agctgtactg acttgagaca      2237
agctctaact ttttaaacat tagttcacac gcgtttatcc acttcattat gtccattaag      2297
ctttcatctt agaataccag tttcaccatt tgggagctgt ttgtaatatg tgcaacctta      2357
taaatagtgt tttccaaact gtgtcccagg actgcaaate tttaatgtga aatgtctttt      2417
tataatctct tcctttaaaa aaaaccaata aaataaaatg ccacatgcaa actc      2471

```

<210> 5

<211> 316

<212> PRT

<213> Homo sapiens

<220>

<221> VARIANT

<222> 18

<223> 5-2-162 : polymorphic amino acid Tyr or Phe

<221> VARIANT

<222> 35

<223> 5-2-213 : polymorphic amino acid Cys or Arg

<221> VARIANT

<222> 55

<223> 5-3-84 : polymorphic amino acid Val or Met

<221> VARIANT

<222> 183

<223> 5-7-195 : polymorphic amino acid Ser or Arg

<400> 5

```

Met Leu Ser Leu Asn Asn Leu Gln Asn Ile Ile Tyr Asn Pro Val Ile
1          5          10          15
Pro Tyr Val Gly Thr Ile Pro Asp Gln Leu Asp Pro Gly Thr Leu Ile
          20          25          30
Val Ile Cys Gly His Val Pro Ser Asp Ala Asp Arg Phe Gln Val Asp
          35          40          45
Leu Gln Asn Gly Ser Ser Val Lys Pro Arg Ala Asp Val Ala Phe His
          50          55          60
Phe Asn Pro Arg Phe Lys Arg Ala Gly Cys Ile Val Cys Asn Thr Leu
65          70          75          80
Ile Asn Glu Lys Trp Gly Arg Glu Glu Ile Thr Tyr Asp Thr Pro Phe
          85          90          95
Lys Arg Glu Lys Ser Phe Glu Ile Val Ile Met Val Leu Lys Asp Lys
          100         105         110
Phe Gln Val Ala Val Asn Gly Lys His Thr Leu Leu Tyr Gly His Arg
          115         120         125
Ile Gly Pro Glu Lys Ile Asp Thr Leu Gly Ile Tyr Gly Lys Val Asn
          130         135         140
Ile His Ser Ile Gly Phe Ser Phe Ser Ser Asp Leu Gln Ser Thr Gln
145         150         155         160
Ala Ser Ser Leu Glu Leu Thr Glu Ile Ser Arg Glu Asn Val Pro Lys
          165         170         175
Ser Gly Thr Pro Gln Leu Ser Leu Pro Phe Ala Ala Arg Leu Asn Thr
          180         185         190
Pro Met Gly Pro Gly Arg Thr Val Val Val Lys Gly Glu Val Asn Ala
          195         200         205
Asn Ala Lys Ser Phe Asn Val Asp Leu Leu Ala Gly Lys Ser Lys Asp
          210         215         220
Ile Ala Leu His Leu Asn Pro Arg Leu Asn Ile Lys Ala Phe Val Arg
225         230         235         240
Asn Ser Phe Leu Gln Glu Ser Trp Gly Glu Glu Arg Asn Ile Thr
          245         250         255
Ser Phe Pro Phe Ser Pro Gly Met Tyr Phe Glu Met Ile Ile Tyr Cys
          260         265         270
Asp Val Arg Glu Phe Lys Val Ala Val Asn Gly Val His Ser Leu Glu
          275         280         285
Tyr Lys His Arg Phe Lys Glu Leu Ser Ser Ile Asp Thr Leu Glu Ile
          290         295         300
Asn Gly Asp Ile His Leu Leu Glu Val Arg Ser Trp
305         310         315

```

<210> 6

<211> 358

<212> PRT

<213> Homo sapiens

```

<220>
<221> VARIANT
<222> 18
<223> 5-2-162 : polymorphic amino acid Tyr or Phe

<221> VARIANT
<222> 35
<223> 5-2-213 : polymorphic amino acid Cys or Arg

<221> VARIANT
<222> 55
<223> 5-3-84 : polymorphic amino acid Val or Met

<221> VARIANT
<222> 204
<223> 5-202-95 : polymorphic amino acid Asp or Tyr

<221> VARIANT
<222> 211
<223> 5-202-117 : polymorphic amino acid Leu or Stop

<221> VARIANT
<222> 225
<223> 5-7-195 : polymorphic amino acid Ser or Arg

<400> 6
Met Leu Ser Leu Asn Asn Leu Gln Asn Ile Ile Tyr Asn Pro Val Ile
1          5          10          15
Pro Tyr Val Gly Thr Ile Pro Asp Gln Leu Asp Pro Gly Thr Leu Ile
          20          25          30
Val Ile Cys Gly His Val Pro Ser Asp Ala Asp Arg Phe Gln Val Asp
          35          40          45
Leu Gln Asn Gly Ser Ser Val Lys Pro Arg Ala Asp Val Ala Phe His
          50          55          60
Phe Asn Pro Arg Phe Lys Arg Ala Gly Cys Ile Val Cys Asn Thr Leu
65          70          75          80
Ile Asn Glu Lys Trp Gly Arg Glu Glu Ile Thr Tyr Asp Thr Pro Phe
          85          90          95
Lys Arg Glu Lys Ser Phe Glu Ile Val Ile Met Val Leu Lys Asp Lys
          100          105          110
Phe Gln Val Ala Val Asn Gly Lys His Thr Leu Leu Tyr Gly His Arg
          115          120          125
Ile Gly Pro Glu Lys Ile Asp Thr Leu Gly Ile Tyr Gly Lys Val Asn
          130          135          140
Ile His Ser Ile Gly Phe Ser Phe Ser Ser Asp Leu Gln Ser Thr Gln
145          150          155          160
Ala Ser Ser Leu Glu Leu Thr Glu Ile Ser Arg Glu Asn Val Pro Lys
          165          170          175
Ser Gly Thr Pro Gln Leu Pro Ser Asn Arg Gly Gly Asp Ile Ser Lys
          180          185          190
Ile Ala Pro Arg Thr Val Tyr Thr Lys Ser Lys Asp Ser Thr Val Asn
          195          200          205
His Thr Leu Thr Cys Thr Lys Ile Pro Pro Met Asn Tyr Val Ser Lys
          210          215          220

```



```

Ser Leu Pro Phe Ala Ala Arg Leu Asn Thr Pro Met Gly Pro Gly Arg
225                230                235                240
Thr Val Val Val Lys Gly Glu Val Asn Ala Asn Ala Lys Ser Phe Asn
                245                250                255
Val Asp Leu Leu Ala Gly Lys Ser Lys Asp Ile Ala Leu His Leu Asn
                260                265                270
Pro Arg Leu Asn Ile Lys Ala Phe Val Arg Asn Ser Phe Leu Gln Glu
                275                280                285
Ser Trp Gly Glu Glu Glu Arg Asn Ile Thr Ser Phe Pro Phe Ser Pro
                290                295                300
Gly Met Tyr Phe Glu Met Ile Ile Tyr Cys Asp Val Arg Glu Phe Lys
305                310                315                320
Val Ala Val Asn Gly Val His Ser Leu Glu Tyr Lys His Arg Phe Lys
                325                330                335
Glu Leu Ser Ser Ile Asp Thr Leu Glu Ile Asn Gly Asp Ile His Leu
                340                345                350
Leu Glu Val Arg Ser Trp
                355

```

```

<210> 7
<211> 368
<212> PRT
<213> Homo sapiens

```

```

<220>
<221> VARIANT
<222> 18
<223> 5-2-162 : polymorphic amino acid Tyr or Phe

```

```

<221> VARIANT
<222> 35
<223> 5-2-213 : polymorphic amino acid Cys or Arg

```

```

<221> VARIANT
<222> 55
<223> 5-3-84 : polymorphic amino acid Val or Met

```

```

<221> VARIANT
<222> 183
<223> 5-7-195 : polymorphic amino acid Ser or Arg

```

```

<400> 7
Met Leu Ser Leu Asn Asn Leu Gln Asn Ile Ile Tyr Asn Pro Val Ile
1                5                10                15
Pro Tyr Val Gly Thr Ile Pro Asp Gln Leu Asp Pro Gly Thr Leu Ile
                20                25                30
Val Ile Cys Gly His Val Pro Ser Asp Ala Asp Arg Phe Gln Val Asp
                35                40                45
Leu Gln Asn Gly Ser Ser Val Lys Pro Arg Ala Asp Val Ala Phe His
                50                55                60
Phe Asn Pro Arg Phe Lys Arg Ala Gly Cys Ile Val Cys Asn Thr Leu
65                70                75                80
Ile Asn Glu Lys Trp Gly Arg Glu Glu Ile Thr Tyr Asp Thr Pro Phe
                85                90                95

```

Lys Arg Glu Lys Ser Phe Glu Ile Val Ile Met Val Leu Lys Asp Lys
 100 105 110
 Phe Gln Val Ala Val Asn Gly Lys His Thr Leu Leu Tyr Gly His Arg
 115 120 125
 Ile Gly Pro Glu Lys Ile Asp Thr Leu Gly Ile Tyr Gly Lys Val Asn
 130 135 140
 Ile His Ser Ile Gly Phe Ser Phe Ser Ser Asp Leu Gln Ser Thr Gln
 145 150 155 160
 Ala Ser Ser Leu Glu Leu Thr Glu Ile Ser Arg Glu Asn Val Pro Lys
 165 170 175
 Ser Gly Thr Pro Gln Leu Ser Leu Pro Phe Ala Ala Arg Leu Asn Thr
 180 185 190
 Pro Met Gly Pro Gly Arg Thr Val Val Val Lys Gly Glu Val Asn Ala
 195 200 205
 Asn Ala Lys Ser Phe Asn Val Asp Leu Leu Ala Gly Lys Ser Lys Asp
 210 215 220
 Ile Ala Leu His Leu Asn Pro Arg Leu Asn Ile Lys Ala Phe Val Arg
 225 230 235 240
 Asn Ser Phe Leu Gln Glu Ser Trp Gly Glu Glu Glu Arg Asn Ile Thr
 245 250 255
 Ser Phe Pro Phe Ser Pro Gly Met Tyr Phe Glu Met Ile Ile Tyr Cys
 260 265 270
 Asp Val Arg Glu Phe Lys Val Ala Val Asn Gly Val His Ser Leu Glu
 275 280 285
 Tyr Lys His Arg Phe Lys Glu Leu Ser Ser Ile Asp Thr Leu Glu Ile
 290 295 300
 Asn Gly Asp Ile His Leu Leu Glu Gln Ser Phe Asn Gln Lys Ser Glu
 305 310 315 320
 Met Lys His Ile Asn Lys Ala Gly Gly Ala Thr Asp Arg Leu Pro Pro
 325 330 335
 His Arg Ser Phe Arg Leu His Ser Leu Pro Thr Gly Leu His Trp Lys
 340 345 350
 Leu Asn Lys Asn Pro Gln Asn Ser Asn Phe Leu Gly Met Pro Pro Leu
 355 360 365

<210> 8

<211> 1738

<212> DNA

<213> Mus musculus

<400> 8

gagtggttact accaccggggg acaagttttt acttttgagta atccttaaat gaagagtggg 60
 taaagtgtgt atacggaaga gagactccaa tcaacaatat caataagttg aaaaagaaaa 120
 atg ttg tcc tta aat aac cta caa aat atc atc tat aac ccg ata atc 168
 Met Leu Ser Leu Asn Asn Leu Gln Asn Ile Ile Tyr Asn Pro Ile Ile
 1 5 10 15
 ccc tat gtt ggc acc att act gag caa ttg aag cct ggc tct ctg att 216
 Pro Tyr Val Gly Thr Ile Thr Glu Gln Leu Lys Pro Gly Ser Leu Ile
 20 25 30
 gta atc cgt ggg cat gtc cct aaa gat tca gaa aga ttc cag gtt gac 264
 Val Ile Arg Gly His Val Pro Lys Asp Ser Glu Arg Phe Gln Val Asp
 35 40 45
 ttt cag ctg ggc aac agc ctg aag cca aga gca gac gtg gcc ttc cac 312
 Phe Gln Leu Gly Asn Ser Leu Lys Pro Arg Ala Asp Val Ala Phe His
 50 55 60

| | |
|---|------|
| ttt aac cct cgg ttc aaa agg tct agc tgc att gtt tgt aac aca ctg | 360 |
| Phe Asn Pro Arg Phe Lys Arg Ser Ser Cys Ile Val Cys Asn Thr Leu | |
| 65 70 75 80 | |
| aca cag gag aag tgg ggc tgg gag gag atc acc tac gac atg ccc ttc | 408 |
| Thr Gln Glu Lys Trp Gly Trp Glu Glu Ile Thr Tyr Asp Met Pro Phe | |
| 85 90 95 | |
| aga aaa gaa aag tcc ttt gag atc gtg ttc atg gtg ctc aag aac aaa | 456 |
| Arg Lys Glu Lys Ser Phe Glu Ile Val Phe Met Val Leu Lys Asn Lys | |
| 100 105 110 | |
| ttc cag gtg gct gtg aac gga agg cat gtt ctg ctg tac gcc cac agg | 504 |
| Phe Gln Val Ala Val Asn Gly Arg His Val Leu Leu Tyr Ala His Arg | |
| 115 120 125 | |
| atc agc ccg gag cag atc gac aca gtg ggc atc tac ggc aaa gtg aac | 552 |
| Ile Ser Pro Glu Gln Ile Asp Thr Val Gly Ile Tyr Gly Lys Val Asn | |
| 130 135 140 | |
| atc cac tcc atc ggg ttc aga ttc agc tcg gat tta cag agt atg gaa | 600 |
| Ile His Ser Ile Gly Phe Arg Phe Ser Ser Asp Leu Gln Ser Met Glu | |
| 145 150 155 160 | |
| aca tct gct ctg gga ctg aca cag ata aac aga gag aat ata caa aag | 648 |
| Thr Ser Ala Leu Gly Leu Thr Gln Ile Asn Arg Glu Asn Ile Gln Lys | |
| 165 170 175 | |
| cca ggc aag ctc cag ctg agc ctg cca ttt gaa gca agg ttg aat gcc | 696 |
| Pro Gly Lys Leu Gln Leu Ser Leu Pro Phe Glu Ala Arg Leu Asn Ala | |
| 180 185 190 | |
| tcc atg ggt cct gga cga acc gtt gtc att aaa ggg gaa gtg aac acc | 744 |
| Ser Met Gly Pro Gly Arg Thr Val Val Ile Lys Gly Glu Val Asn Thr | |
| 195 200 205 | |
| aat gcc cga agc ttt aat gtt gac cta gtg gca gga aaa aca agg gat | 792 |
| Asn Ala Arg Ser Phe Asn Val Asp Leu Val Ala Gly Lys Thr Arg Asp | |
| 210 215 220 | |
| atc gct ctg cac ttg aac cca cgc ctc aat gtg aaa gca ttt gta aga | 840 |
| Ile Ala Leu His Leu Asn Pro Arg Leu Asn Val Lys Ala Phe Val Arg | |
| 225 230 235 240 | |
| aat tcc ttt ctt cag gat gcc tgg gga gaa gag gag aga aat att acc | 888 |
| Asn Ser Phe Leu Gln Asp Ala Trp Gly Glu Glu Glu Arg Asn Ile Thr | |
| 245 250 255 | |
| tgc ttc cca ttt agt tct ggg atg tac ttt gag atg ata atc tac tgt | 936 |
| Cys Phe Pro Phe Ser Ser Gly Met Tyr Phe Glu Met Ile Ile Tyr Cys | |
| 260 265 270 | |
| gat gtc cgg gaa ttc aag gtt gct ata aat ggt gtg cac agc ctg gag | 984 |
| Asp Val Arg Glu Phe Lys Val Ala Ile Asn Gly Val His Ser Leu Glu | |
| 275 280 285 | |
| tac aaa cac aga ttt aaa gac cta agc agt att gat aca cta tca gtc | 1032 |
| Tyr Lys His Arg Phe Lys Asp Leu Ser Ser Ile Asp Thr Leu Ser Val | |
| 290 295 300 | |
| gat ggt gat atc cgt ttg ctg gat gta agg agc tgg tag ctacatgac | 1081 |
| Asp Gly Asp Ile Arg Leu Leu Asp Val Arg Ser Trp * | |
| 305 310 315 | |
| tgccaaaacc cccgaaatac aaaatggctt atccggtact ggccatgtca aatgcatctc | 1141 |
| gctttcacca tattgtttat attgctaagt tgagctcctc caacatcaag tctactggt | 1201 |
| gttggtcaggt ctggccatgc agtacattca gaggaacaga gccggggcaa tcacagctca | 1261 |
| ctgccagaga ggctctgcac actgggtccc tcttataaac cacactcagc aaatatttaa | 1321 |
| gtgcctaata tactacatat actagctaata agggatggca agcatacttc ctttgtatat | 1381 |
| tctctgagcc gggcacagac atggcagggc ccagaacttg tgtggtccat gttttctagc | 1441 |
| acttcgtacc agtttctggc ctcctaattgt agggctcttct tgctggcatt gcattaaccc | 1501 |

```

cactaggggc ctttgcagtt aaggtcagaa aaatatacta atggatggca aacactactt 1561
ccccagcaac ccttttcata atcagcattc tatcatatct cataattgaa gactgcatag 1621
catttactta gctctcaccg ctttaaactt tataaaatgt atgatgctga acacagcaga 1681
aaaactgagg ccaaaaccct gaattatgac aaaacaagtg ttctgctcca agcagat 1738

```

<210> 9

<211> 316

<212> PRT

<213> Mus musculus

<400> 9

```

Met Leu Ser Leu Asn Asn Leu Gln Asn Ile Ile Tyr Asn Pro Ile Ile
1      5      10      15
Pro Tyr Val Gly Thr Ile Thr Glu Gln Leu Lys Pro Gly Ser Leu Ile
      20      25      30
Val Ile Arg Gly His Val Pro Lys Asp Ser Glu Arg Phe Gln Val Asp
      35      40      45
Phe Gln Leu Gly Asn Ser Leu Lys Pro Arg Ala Asp Val Ala Phe His
      50      55      60
Phe Asn Pro Arg Phe Lys Arg Ser Ser Cys Ile Val Cys Asn Thr Leu
65      70      75      80
Thr Gln Glu Lys Trp Gly Trp Glu Glu Ile Thr Tyr Asp Met Pro Phe
      85      90      95
Arg Lys Glu Lys Ser Phe Glu Ile Val Phe Met Val Leu Lys Asn Lys
      100     105     110
Phe Gln Val Ala Val Asn Gly Arg His Val Leu Leu Tyr Ala His Arg
      115     120     125
Ile Ser Pro Glu Gln Ile Asp Thr Val Gly Ile Tyr Gly Lys Val Asn
      130     135     140
Ile His Ser Ile Gly Phe Arg Phe Ser Ser Asp Leu Gln Ser Met Glu
145     150     155     160
Thr Ser Ala Leu Gly Leu Thr Gln Ile Asn Arg Glu Asn Ile Gln Lys
      165     170     175
Pro Gly Lys Leu Gln Leu Ser Leu Pro Phe Glu Ala Arg Leu Asn Ala
      180     185     190
Ser Met Gly Pro Gly Arg Thr Val Ile Lys Gly Glu Val Asn Thr
      195     200     205
Asn Ala Arg Ser Phe Asn Val Asp Leu Val Ala Gly Lys Thr Arg Asp
      210     215     220
Ile Ala Leu His Leu Asn Pro Arg Leu Asn Val Lys Ala Phe Val Arg
225     230     235     240
Asn Ser Phe Leu Gln Asp Ala Trp Gly Glu Glu Glu Arg Asn Ile Thr
      245     250     255
Cys Phe Pro Phe Ser Ser Gly Met Tyr Phe Glu Met Ile Ile Tyr Cys
      260     265     270
Asp Val Arg Glu Phe Lys Val Ala Ile Asn Gly Val His Ser Leu Glu
      275     280     285
Tyr Lys His Arg Phe Lys Asp Leu Ser Ser Ile Asp Thr Leu Ser Val
      290     295     300
Asp Gly Asp Ile Arg Leu Leu Asp Val Arg Ser Trp
305     310     315

```

<210> 10
 <211> 18
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> sequencing oligonucleotide PrimerPU

<400> 10
 tgtaaaacga cggccagt

18

<210> 11
 <211> 18
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> sequencing oligonucleotide PrimerRP

<400> 11
 caggaaacag ctatgacc

18

<210> 12
 <211> 106746
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> 1..68647
 <223> 5'regulation region

<221> misc_feature
 <222> 66647..68647
 <223> promoter

<221> misc_feature
 <222> 97156..106746
 <223> 3'regulation region

<221> exon
 <222> 68648..68741
 <223> exon0

<221> exon
 <222> 70647..70794
 <223> exon1

<221> exon
 <222> 82208..82296
 <223> exon2

<221> exon

<222> 83613..83823
<223> exon3

<221> exon
<222> 85298..85417
<223> exon4

<221> exon
<222> 86389..86445
<223> exon5

<221> exon
<222> 87496..87522
<223> exon6

<221> exon
<222> 87650..87775
<223> exon6bis

<221> exon
<222> 88295..88383
<223> exon7

<221> exon
<222> 89484..89649
<223> exon8

<221> exon
<222> 92749..97155
<223> exon9

<221> exon
<222> 92749..92883
<223> exon9bis

<221> exon
<222> 95821..97155
<223> exon9ter

<221> misc_feature
<222> 70647..70794
<223> homology with genset EST : A241850

<221> misc_feature
<222> 68648..68741
<223> homology with genset EST : A241850

<221> misc_feature
<222> 82208..82229
<223> homology with genset EST : A241850

<221> allele
<222> 278
<223> 99-1601-278 : polymorphic base A or C

<221> allele
<222> 402
<223> 99-1601-402 : polymorphic base w= A or T

<221> allele
<222> 472
<223> 99-1601-472 : polymorphic base A or T

<221> allele
<222> 2955
<223> 99-13801-100 : polymorphic base T or C

<221> allele
<222> 12167
<223> 99-13806-166 : polymorphic base G or A

<221> allele
<222> 12536
<223> 99-13799-376 : polymorphic base T or G

<221> allele
<222> 17593
<223> 99-13798-297 : polymorphic base T or C

<221> allele
<222> 17606
<223> 99-13798-284 : polymorphic base T or C

<221> allele
<222> 22079
<223> 99-1602-200 : polymorphic base G or C

<221> allele
<222> 28964
<223> 99-13794-186 : polymorphic base T or C

<221> allele
<222> 29003
<223> 99-13794-147 : polymorphic base C or G

<221> allele
<222> 31077
<223> 99-13812-384 : polymorphic base T or C

<221> allele
<222> 31766
<223> 99-13805-313 : polymorphic base T or C

<221> allele
<222> 34791
<223> 99-1587-281 : polymorphic base A or G

<221> allele
<222> 45751
<223> 99-1582-430 : polymorphic base C or T

<221> allele
<222> 49847
<223> 99-1585-465 : polymorphic base T or C

<221> allele
<222> 49855
<223> 99-1585-457 : polymorphic base T or C

<221> allele
<222> 49886
<223> 99-1585-426 : polymorphic base G or A

<221> allele
<222> 49900
<223> 99-1585-412 : polymorphic base G or A

<221> allele
<222> 49906
<223> 99-1585-406 : polymorphic base C or A

<221> allele
<222> 49921
<223> 99-1585-391 : polymorphic base C or A

<221> allele
<222> 49939
<223> 99-1585-373 : polymorphic base G or A

<221> allele
<222> 50256
<223> 99-1585-55 : polymorphic base C or A

<221> allele
<222> 54955
<223> 99-1607-373 : polymorphic base T or C

<221> allele
<222> 64239
<223> 99-1577-105 : polymorphic base A or G

<221> allele
<222> 65436
<223> 99-1591-235 : polymorphic base A or G

<221> allele
<222> 65496
<223> 99-1591-295 : polymorphic base G or T

<221> allele
<222> 66967
<223> 99-1572-315 : polymorphic base C or T

<221> allele
<222> 66987

<223> 99-1572-335 : polymorphic base A or G

<221> allele

<222> 67092

<223> 99-1572-440 : polymorphic base C or T

<221> allele

<222> 67129

<223> 99-1572-477 : polymorphic base A or T

<221> allele

<222> 67229

<223> 99-1572-578 : polymorphic base C or T

<221> allele

<222> 67433

<223> 5-264-188 : polymorphic base A or G

<221> allele

<222> 67723

<223> 5-169-97 : polymorphic base G or C

<221> allele

<222> 67834

<223> 5-169-208 : polymorphic base A or G

<221> allele

<222> 67955

<223> 5-169-331 : polymorphic base C or T

<221> allele

<222> 68213

<223> 5-170-238 : polymorphic base A or G

<221> allele

<222> 68263

<223> 5-170-288 : polymorphic base A or C

<221> allele

<222> 68375

<223> 5-170-400 : polymorphic base G or C

<221> allele

<222> 68477

<223> 5-171-156 : polymorphic base G or T

<221> allele

<222> 68525

<223> 5-171-204 : polymorphic base C or T

<221> allele

<222> 68594

<223> 5-171-273 : polymorphic base A or G

<221> allele

<222> 68610
<223> 5-171-289 : polymorphic base C or T

<221> allele
<222> 70566
<223> 5-1-60 : polymorphic base C or T

<221> allele
<222> 70728
<223> 5-1-222 : polymorphic base A or G

<221> allele
<222> 80038
<223> 99-1578-99 : polymorphic base G or T

<221> allele
<222> 80118
<223> 99-1578-179 : polymorphic base A or T

<221> allele
<222> 80170
<223> 99-1578-231 : insertion AC

<221> allele
<222> 80183
<223> 99-1578-245 : deletion AT

<221> allele
<222> 80435
<223> 99-1578-496 : polymorphic base C or T

<221> allele
<222> 82090
<223> 5-2-30 : insertion CAG

<221> allele
<222> 82165
<223> 5-2-109 : polymorphic base G or T

<221> allele
<222> 82169
<223> 5-2-113 : deletion GTTT

<221> allele
<222> 82218
<223> 5-2-162 : polymorphic base A or T

<221> allele
<222> 82234
<223> 5-2-178 : polymorphic base C or T

<221> allele
<222> 82268
<223> 5-2-213 : polymorphic base C or T

<221> allele
<222> 82393
<223> 99-1605-112 : polymorphic base T or C

<221> allele
<222> 83587
<223> 5-3-27 : polymorphic base A or G

<221> allele
<222> 83643
<223> 5-3-83 : polymorphic base C or T

<221> allele
<222> 83644
<223> 5-3-84 : polymorphic base A or G

<221> allele
<222> 83808
<223> 5-3-248 : polymorphic base A or G

<221> allele
<222> 83881
<223> 5-3-321 : polymorphic base G or T

<221> allele
<222> 83884
<223> 5-3-324 : polymorphic base C or T

<221> allele
<222> 83909
<223> 5-4-313 : polymorphic base A or G

<221> allele
<222> 83937
<223> 5-3-377 : insertion TTTG

<221> allele
<222> 83947
<223> 5-4-351 : polymorphic base C or T

<221> allele
<222> 83982
<223> 5-4-386 : polymorphic base A or G

<221> allele
<222> 83988
<223> 5-4-392 : polymorphic base GGG or TA

<221> allele
<222> 84047
<223> 5-260-255 : polymorphic base C or T

<221> allele
<222> 84092
<223> 5-260-300 : polymorphic base C or T

<221> allele
<222> 84145
<223> 5-260-353 : polymorphic base C or T

<221> allele
<222> 85202
<223> 5-9-50 : polymorphic base C or T

<221> allele
<222> 86259
<223> 5-5-21 : polymorphic base A or G

<221> allele
<222> 86323
<223> 5-5-85 : polymorphic base TATAAAATATT or ACAGGTTATATA

<221> allele
<222> 87713
<223> 5-202-95 : polymorphic base G or T

<221> allele
<222> 87735
<223> 5-202-117 : polymorphic base A or T

<221> allele
<222> 87787
<223> 5-202-169 : polymorphic base A or C

<221> allele
<222> 87806
<223> 5-202-188 : polymorphic base A or G

<221> allele
<222> 87860
<223> 5-202-242 : polymorphic base A or G

<221> allele
<222> 87902
<223> 5-202-284 : polymorphic base C or T

<221> allele
<222> 87980
<223> 5-202-362 : deletion CC

<221> allele
<222> 88012
<223> 5-202-394 : polymorphic base C or T

<221> allele
<222> 88215
<223> 5-7-113 : polymorphic base C or T

<221> allele
<222> 88283

<223> 5-7-181 : polymorphic base G or C

<221> allele
<222> 88297
<223> 5-7-195 : polymorphic base G or C

<221> allele
<222> 88442
<223> 5-7-340 : polymorphic base C or T

<221> allele
<222> 88471
<223> 5-7-369 : polymorphic base A or T

<221> allele
<222> 88480
<223> 5-7-378 : polymorphic base C or T

<221> allele
<222> 89394
<223> 5-181-57 : polymorphic base A or G

<221> allele
<222> 89464
<223> 5-181-127 : polymorphic base C or T

<221> allele
<222> 89471
<223> 5-181-134 : polymorphic base C or T

<221> allele
<222> 89658
<223> 5-181-321 : polymorphic base A or C

<221> allele
<222> 92760
<223> 5-10-39 : polymorphic base C or T

<221> allele
<222> 93023
<223> 5-10-302 : polymorphic base A or G

<221> allele
<222> 93055
<223> 5-10-334 : polymorphic base A or C

<221> allele
<222> 93247
<223> 5-11-158 : polymorphic base A or G

<221> allele
<222> 93319
<223> 5-11-230 : polymorphic base G or T

<221> allele

<222> 93323
<223> 5-11-234 : polymorphic base C or T

<221> allele
<222> 93388
<223> 5-11-299 : polymorphic base A or T

<221> allele
<222> 93393
<223> 5-11-304 : polymorphic base A or C

<221> allele
<222> 93418
<223> 5-11-329 : polymorphic base C or T

<221> allele
<222> 93515
<223> 5-12-56 : insertion CTTT

<221> allele
<222> 93726
<223> 5-12-267 : polymorphic base A or C

<221> allele
<222> 93903
<223> 5-13-145 : polymorphic base C or T

<221> allele
<222> 94170
<223> 5-14-44 : polymorphic base C or T

<221> allele
<222> 94218
<223> 5-14-93 : polymorphic base A or T

<221> allele
<222> 94269
<223> 5-14-144 : insertion T

<221> allele
<222> 94290
<223> 5-14-165 : polymorphic base C or T

<221> allele
<222> 94422
<223> 5-14-297 : polymorphic base A or C

<221> allele
<222> 94432
<223> 5-14-307 : polymorphic base G or T

<221> allele
<222> 94720
<223> 5-15-219 : polymorphic base A or T

<221> allele
<222> 94989
<223> 5-16-157 : polymorphic base A or G

<221> allele
<222> 95261
<223> 5-17-140 : polymorphic base A or G

<221> allele
<222> 95340
<223> 5-18-51 : polymorphic base G or T

<221> allele
<222> 95497
<223> 5-18-208 : polymorphic base A or C

<221> allele
<222> 95770
<223> 5-300-238 : polymorphic base C or T

<221> allele
<222> 95819
<223> 5-300-287 : polymorphic base A or G

<221> allele
<222> 96145
<223> 5-262-49 : insertion C

<221> allele
<222> 96181
<223> 5-262-85 : polymorphic base C or T

<221> allele
<222> 96350
<223> 5-262-254 : polymorphic base C or T

<221> allele
<222> 96951
<223> 5-263-404 : polymorphic base C or T

<221> allele
<222> 97144
<223> 5-265-244 : polymorphic base A or G

<221> allele
<222> 97276
<223> 5-265-376 : polymorphic base A or G

<221> allele
<222> 102267
<223> 99-7183-338 : polymorphic base C or T

<221> allele
<222> 105937
<223> 99-7207-138 : polymorphic base A or G

<221> misc_binding
<222> 258..277
<223> 99-1601-278.mis1

<221> misc_binding
<222> 279..298
<223> 99-1601-278.mis2 complement

<221> misc_binding
<222> 382..401
<223> 99-1601-402.mis1

<221> misc_binding
<222> 403..422
<223> 99-1601-402.mis2 complement

<221> misc_binding
<222> 452..471
<223> 99-1601-472.mis1

<221> misc_binding
<222> 473..492
<223> 99-1601-472.mis2 complement

<221> misc_binding
<222> 2935..2954
<223> 99-13801-100.mis2

<221> misc_binding
<222> 2956..2975
<223> 99-13801-100.mis1 complement

<221> misc_binding
<222> 12147..12166
<223> 99-13806-166.mis2

<221> misc_binding
<222> 12168..12187
<223> 99-13806-166.mis1 complement

<221> misc_binding
<222> 12516..12535
<223> 99-13799-376.mis2

<221> misc_binding
<222> 12537..12556
<223> 99-13799-376.mis1 complement

<221> misc_binding
<222> 17573..17592
<223> 99-13798-297.mis2

<221> misc_binding
<222> 17594..17613

<223> 99-13798-297.mis1 complement

<221> misc_binding

<222> 17586..17605

<223> 99-13798-284.mis2

<221> misc_binding

<222> 17607..17626

<223> 99-13798-284.mis1 complement

<221> misc_binding

<222> 22059..22078

<223> 99-1602-200.mis1

<221> misc_binding

<222> 22080..22099

<223> 99-1602-200.mis2 complement

<221> misc_binding

<222> 28944..28963

<223> 99-13794-186.mis2

<221> misc_binding

<222> 28965..28984

<223> 99-13794-186.mis1 complement

<221> misc_binding

<222> 28983..29002

<223> 99-13794-147.mis2

<221> misc_binding

<222> 29004..29023

<223> 99-13794-147.mis1 complement

<221> misc_binding

<222> 31057..31076

<223> 99-13812-384.mis2

<221> misc_binding

<222> 31078..31097

<223> 99-13812-384.mis1 complement

<221> misc_binding

<222> 31746..31765

<223> 99-13805-313.mis2

<221> misc_binding

<222> 31767..31786

<223> 99-13805-313.mis1 complement

<221> misc_binding

<222> 34771..34790

<223> 99-1587-281.mis1

<221> misc_binding

<222> 34792..34811
<223> 99-1587-281.mis2 complement

<221> misc_binding
<222> 45731..45750
<223> 99-1582-430.mis1

<221> misc_binding
<222> 45752..45771
<223> 99-1582-430.mis2 complement

<221> misc_binding
<222> 49827..49846
<223> 99-1585-465.mis2

<221> misc_binding
<222> 49848..49867
<223> 99-1585-465.mis1 complement

<221> misc_binding
<222> 49835..49854
<223> 99-1585-457.mis2

<221> misc_binding
<222> 49856..49875
<223> 99-1585-457.mis1 complement

<221> misc_binding
<222> 49866..49885
<223> 99-1585-426.mis2

<221> misc_binding
<222> 49887..49906
<223> 99-1585-426.mis1 complement

<221> misc_binding
<222> 49880..49899
<223> 99-1585-412.mis2

<221> misc_binding
<222> 49901..49920
<223> 99-1585-412.mis1 complement

<221> misc_binding
<222> 49886..49905
<223> 99-1585-406.mis2

<221> misc_binding
<222> 49907..49926
<223> 99-1585-406.mis1 complement

<221> misc_binding
<222> 49901..49920
<223> 99-1585-391.mis2

<221> misc_binding
<222> 49922..49941
<223> 99-1585-391.mis1 complement

<221> misc_binding
<222> 49919..49938
<223> 99-1585-373.mis2

<221> misc_binding
<222> 49940..49959
<223> 99-1585-373.mis1 complement

<221> misc_binding
<222> 50236..50255
<223> 99-1585-55.mis2

<221> misc_binding
<222> 50257..50276
<223> 99-1585-55.mis1 complement

<221> misc_binding
<222> 54935..54954
<223> 99-1607-373.mis2

<221> misc_binding
<222> 54956..54975
<223> 99-1607-373.mis1 complement

<221> misc_binding
<222> 64219..64238
<223> 99-1577-105.mis1

<221> misc_binding
<222> 64240..64259
<223> 99-1577-105.mis2 complement

<221> misc_binding
<222> 65416..65435
<223> 99-1591-235.mis1

<221> misc_binding
<222> 65437..65456
<223> 99-1591-235.mis2 complement

<221> misc_binding
<222> 65476..65495
<223> 99-1591-295.mis1

<221> misc_binding
<222> 65497..65516
<223> 99-1591-295.mis2 complement

<221> misc_binding
<222> 66947..66966
<223> 99-1572-315.mis1

<221> misc_binding
<222> 66968..66987
<223> 99-1572-315.mis2 complement

<221> misc_binding
<222> 66967..66986
<223> 99-1572-335.mis1

<221> misc_binding
<222> 66988..67007
<223> 99-1572-335.mis2 complement

<221> misc_binding
<222> 67072..67091
<223> 99-1572-440.mis1

<221> misc_binding
<222> 67093..67112
<223> 99-1572-440.mis2 complement

<221> misc_binding
<222> 67109..67128
<223> 99-1572-477.mis1

<221> misc_binding
<222> 67130..67149
<223> 99-1572-477.mis2 complement

<221> misc_binding
<222> 67209..67228
<223> 99-1572-578.mis1

<221> misc_binding
<222> 67230..67249
<223> 99-1572-578.mis2 complement

<221> misc_binding
<222> 67413..67432
<223> 5-264-188.mis1

<221> misc_binding
<222> 67434..67453
<223> 5-264-188.mis2 complement

<221> misc_binding
<222> 67703..67722
<223> 5-169-97.mis1

<221> misc_binding
<222> 67724..67743
<223> 5-169-97.mis2 complement

<221> misc_binding
<222> 67814..67833

<223> 5-169-208.mis1

<221> misc_binding
<222> 67835..67854
<223> 5-169-208.mis2 complement

<221> misc_binding
<222> 67935..67954
<223> 5-169-331.mis1

<221> misc_binding
<222> 67956..67975
<223> 5-169-331.mis2 complement

<221> misc_binding
<222> 68193..68212
<223> 5-170-238.mis1

<221> misc_binding
<222> 68214..68233
<223> 5-170-238.mis2 complement

<221> misc_binding
<222> 68243..68262
<223> 5-170-288.mis1

<221> misc_binding
<222> 68264..68283
<223> 5-170-288.mis2 complement

<221> misc_binding
<222> 68355..68374
<223> 5-170-400.mis1

<221> misc_binding
<222> 68376..68395
<223> 5-170-400.mis2 complement

<221> misc_binding
<222> 68457..68476
<223> 5-171-156.mis1

<221> misc_binding
<222> 68478..68497
<223> 5-171-156.mis2 complement

<221> misc_binding
<222> 68505..68524
<223> 5-171-204.mis1

<221> misc_binding
<222> 68526..68545
<223> 5-171-204.mis2 complement

<221> misc_binding

<222> 68574..68593
<223> 5-171-273.mis1

<221> misc_binding
<222> 68595..68614
<223> 5-171-273.mis2 complement

<221> misc_binding
<222> 68590..68609
<223> 5-171-289.mis1

<221> misc_binding
<222> 68611..68630
<223> 5-171-289.mis2 complement

<221> misc_binding
<222> 70546..70565
<223> 5-1-60.mis1

<221> misc_binding
<222> 70567..70586
<223> 5-1-60.mis2 complement

<221> misc_binding
<222> 70708..70727
<223> 5-1-222.mis1

<221> misc_binding
<222> 70729..70748
<223> 5-1-222.mis2 complement

<221> misc_binding
<222> 80018..80037
<223> 99-1578-99.mis1

<221> misc_binding
<222> 80039..80058
<223> 99-1578-99.mis2 complement

<221> misc_binding
<222> 80098..80117
<223> 99-1578-179.mis1

<221> misc_binding
<222> 80119..80138
<223> 99-1578-179.mis2 complement

<221> misc_binding
<222> 80150..80169
<223> 99-1578-231.mis1

<221> misc_binding
<222> 80171..80190
<223> 99-1578-231.mis2 complement

<221> misc_binding
<222> 80163..80182
<223> 99-1578-245.mis1

<221> misc_binding
<222> 80184..80203
<223> 99-1578-245.mis2 complement

<221> misc_binding
<222> 80415..80434
<223> 99-1578-496.mis1

<221> misc_binding
<222> 80436..80455
<223> 99-1578-496.mis2 complement

<221> misc_binding
<222> 82070..82089
<223> 5-2-30.mis1

<221> misc_binding
<222> 82091..82110
<223> 5-2-30.mis2 complement

<221> misc_binding
<222> 82145..82164
<223> 5-2-109.mis1

<221> misc_binding
<222> 82166..82185
<223> 5-2-109.mis2 complement

<221> misc_binding
<222> 82149..82168
<223> 5-2-113.mis1

<221> misc_binding
<222> 82170..82189
<223> 5-2-113.mis2 complement

<221> misc_binding
<222> 82198..82217
<223> 5-2-162.mis1

<221> misc_binding
<222> 82219..82238
<223> 5-2-162.mis2 complement

<221> misc_binding
<222> 82214..82233
<223> 5-2-178.mis1

<221> misc_binding
<222> 82235..82254
<223> 5-2-178.mis2 complement

<221> misc_binding
<222> 82248..82267
<223> 5-2-213.mis1

<221> misc_binding
<222> 82269..82288
<223> 5-2-213.mis2 complement

<221> misc_binding
<222> 82373..82392
<223> 99-1605-112.mis2

<221> misc_binding
<222> 82394..82413
<223> 99-1605-112.mis1 complement

<221> misc_binding
<222> 83567..83586
<223> 5-3-27.mis1

<221> misc_binding
<222> 83588..83607
<223> 5-3-27.mis2 complement

<221> misc_binding
<222> 83623..83642
<223> 5-3-83.mis1

<221> misc_binding
<222> 83644..83663
<223> 5-3-83.mis2 complement

<221> misc_binding
<222> 83624..83643
<223> 5-3-84.mis1

<221> misc_binding
<222> 83645..83664
<223> 5-3-84.mis2 complement

<221> misc_binding
<222> 83788..83807
<223> 5-3-248.mis1

<221> misc_binding
<222> 83809..83828
<223> 5-3-248.mis2 complement

<221> misc_binding
<222> 83861..83880
<223> 5-3-321.mis1

<221> misc_binding
<222> 83882..83901

<223> 5-3-321.mis2 complement

<221> misc_binding

<222> 83864..83883

<223> 5-3-324.mis1

<221> misc_binding

<222> 83885..83904

<223> 5-3-324.mis2 complement

<221> misc_binding

<222> 83889..83908

<223> 5-4-313.mis1

<221> misc_binding

<222> 83910..83929

<223> 5-4-313.mis2 complement

<221> misc_binding

<222> 83917..83936

<223> 5-3-377.mis1

<221> misc_binding

<222> 83938..83957

<223> 5-3-377.mis2 complement

<221> misc_binding

<222> 83927..83946

<223> 5-4-351.mis1

<221> misc_binding

<222> 83948..83967

<223> 5-4-351.mis2 complement

<221> misc_binding

<222> 83962..83981

<223> 5-4-386.mis1

<221> misc_binding

<222> 83983..84002

<223> 5-4-386.mis2 complement

<221> misc_binding

<222> 83968..83987

<223> 5-4-392.mis1

<221> misc_binding

<222> 83989..84008

<223> 5-4-392.mis2 complement

<221> misc_binding

<222> 84027..84046

<223> 5-260-255.mis1

<221> misc_binding

<222> 84048..84067
<223> 5-260-255.mis2 complement

<221> misc_binding
<222> 84072..84091
<223> 5-260-300.mis1

<221> misc_binding
<222> 84093..84112
<223> 5-260-300.mis2 complement

<221> misc_binding
<222> 84125..84144
<223> 5-260-353.mis1

<221> misc_binding
<222> 84146..84165
<223> 5-260-353.mis2 complement

<221> misc_binding
<222> 85182..85201
<223> 5-9-50.mis1

<221> misc_binding
<222> 85203..85222
<223> 5-9-50.mis2 complement

<221> misc_binding
<222> 86239..86258
<223> 5-5-21.mis1

<221> misc_binding
<222> 86260..86279
<223> 5-5-21.mis2 complement

<221> misc_binding
<222> 86303..86322
<223> 5-5-85.mis1

<221> misc_binding
<222> 86324..86343
<223> 5-5-85.mis2 complement

<221> misc_binding
<222> 87693..87712
<223> 5-202-95.mis1

<221> misc_binding
<222> 87714..87733
<223> 5-202-95.mis2 complement

<221> misc_binding
<222> 87715..87734
<223> 5-202-117.mis1

<221> misc_binding
<222> 87736..87755
<223> 5-202-117.mis2 complement

<221> misc_binding
<222> 87767..87786
<223> 5-202-169.mis1

<221> misc_binding
<222> 87788..87807
<223> 5-202-169.mis2 complement

<221> misc_binding
<222> 87786..87805
<223> 5-202-188.mis1

<221> misc_binding
<222> 87807..87826
<223> 5-202-188.mis2 complement

<221> misc_binding
<222> 87840..87859
<223> 5-202-242.mis1

<221> misc_binding
<222> 87861..87880
<223> 5-202-242.mis2 complement

<221> misc_binding
<222> 87882..87901
<223> 5-202-284.mis1

<221> misc_binding
<222> 87903..87922
<223> 5-202-284.mis2 complement

<221> misc_binding
<222> 87960..87979
<223> 5-202-362.mis1

<221> misc_binding
<222> 87981..88000
<223> 5-202-362.mis2 complement

<221> misc_binding
<222> 87992..88011
<223> 5-202-394.mis1

<221> misc_binding
<222> 88013..88032
<223> 5-202-394.mis2 complement

<221> misc_binding
<222> 88195..88214
<223> 5-7-113.mis1

<221> misc_binding
<222> 88216..88235
<223> 5-7-113.mis2 complement

<221> misc_binding
<222> 88263..88282
<223> 5-7-181.mis1

<221> misc_binding
<222> 88284..88303
<223> 5-7-181.mis2 complement

<221> misc_binding
<222> 88277..88296
<223> 5-7-195.mis1

<221> misc_binding
<222> 88298..88317
<223> 5-7-195.mis2 complement

<221> misc_binding
<222> 88422..88441
<223> 5-7-340.mis1

<221> misc_binding
<222> 88443..88462
<223> 5-7-340.mis2 complement

<221> misc_binding
<222> 88451..88470
<223> 5-7-369.mis1

<221> misc_binding
<222> 88472..88491
<223> 5-7-369.mis2 complement

<221> misc_binding
<222> 88460..88479
<223> 5-7-378.mis1

<221> misc_binding
<222> 88481..88500
<223> 5-7-378.mis2 complement

<221> misc_binding
<222> 89374..89393
<223> 5-181-57.mis1

<221> misc_binding
<222> 89395..89414
<223> 5-181-57.mis2 complement

<221> misc_binding
<222> 89444..89463

<223> 5-181-127.mis1

<221> misc_binding
<222> 89465..89484
<223> 5-181-127.mis2 complement

<221> misc_binding
<222> 89451..89470
<223> 5-181-134.mis1

<221> misc_binding
<222> 89472..89491
<223> 5-181-134.mis2 complement

<221> misc_binding
<222> 89638..89657
<223> 5-181-321.mis1

<221> misc_binding
<222> 89659..89678
<223> 5-181-321.mis2 complement

<221> misc_binding
<222> 92740..92759
<223> 5-10-39.mis1

<221> misc_binding
<222> 92761..92780
<223> 5-10-39.mis2 complement

<221> misc_binding
<222> 93003..93022
<223> 5-10-302.mis1

<221> misc_binding
<222> 93024..93043
<223> 5-10-302.mis2 complement

<221> misc_binding
<222> 93035..93054
<223> 5-10-334.mis1

<221> misc_binding
<222> 93056..93075
<223> 5-10-334.mis2 complement

<221> misc_binding
<222> 93227..93246
<223> 5-11-158.mis1

<221> misc_binding
<222> 93248..93267
<223> 5-11-158.mis2 complement

<221> misc_binding

<222> 93299..93318
<223> 5-11-230.mis1

<221> misc_binding
<222> 93320..93339
<223> 5-11-230.mis2 complement

<221> misc_binding
<222> 93303..93322
<223> 5-11-234.mis1

<221> misc_binding
<222> 93324..93343
<223> 5-11-234.mis2 complement

<221> misc_binding
<222> 93368..93387
<223> 5-11-299.mis1

<221> misc_binding
<222> 93389..93408
<223> 5-11-299.mis2 complement

<221> misc_binding
<222> 93373..93392
<223> 5-11-304.mis1

<221> misc_binding
<222> 93394..93413
<223> 5-11-304.mis2 complement

<221> misc_binding
<222> 93398..93417
<223> 5-11-329.mis1

<221> misc_binding
<222> 93419..93438
<223> 5-11-329.mis2 complement

<221> misc_binding
<222> 93495..93514
<223> 5-12-56.mis1

<221> misc_binding
<222> 93516..93535
<223> 5-12-56.mis2 complement

<221> misc_binding
<222> 93706..93725
<223> 5-12-267.mis1

<221> misc_binding
<222> 93727..93746
<223> 5-12-267.mis2 complement

<221> misc_binding
<222> 93883..93902
<223> 5-13-145.mis1

<221> misc_binding
<222> 93904..93923
<223> 5-13-145.mis2 complement

<221> misc_binding
<222> 94150..94169
<223> 5-14-44.mis1

<221> misc_binding
<222> 94171..94190
<223> 5-14-44.mis2 complement

<221> misc_binding
<222> 94198..94217
<223> 5-14-93.mis1

<221> misc_binding
<222> 94219..94238
<223> 5-14-93.mis2 complement

<221> misc_binding
<222> 94249..94268
<223> 5-14-144.mis1

<221> misc_binding
<222> 94270..94289
<223> 5-14-144.mis2 complement

<221> misc_binding
<222> 94270..94289
<223> 5-14-165.mis1

<221> misc_binding
<222> 94291..94310
<223> 5-14-165.mis2 complement

<221> misc_binding
<222> 94402..94421
<223> 5-14-297.mis1

<221> misc_binding
<222> 94423..94442
<223> 5-14-297.mis2 complement

<221> misc_binding
<222> 94412..94431
<223> 5-14-307.mis1

<221> misc_binding
<222> 94433..94452
<223> 5-14-307.mis2 complement

<221> misc_binding
<222> 94700..94719
<223> 5-15-219.mis1

<221> misc_binding
<222> 94721..94740
<223> 5-15-219.mis2 complement

<221> misc_binding
<222> 94969..94988
<223> 5-16-157.mis1

<221> misc_binding
<222> 94990..95009
<223> 5-16-157.mis2 complement

<221> misc_binding
<222> 95241..95260
<223> 5-17-140.mis1

<221> misc_binding
<222> 95262..95281
<223> 5-17-140.mis2 complement

<221> misc_binding
<222> 95320..95339
<223> 5-18-51.mis1

<221> misc_binding
<222> 95341..95360
<223> 5-18-51.mis2 complement

<221> misc_binding
<222> 95477..95496
<223> 5-18-208.mis1

<221> misc_binding
<222> 95498..95517
<223> 5-18-208.mis2 complement

<221> misc_binding
<222> 95750..95769
<223> 5-300-238.mis1

<221> misc_binding
<222> 95771..95790
<223> 5-300-238.mis2 complement

<221> misc_binding
<222> 95799..95818
<223> 5-300-287.mis1

<221> misc_binding
<222> 95820..95839

<223> 5-300-287.mis2 complement

<221> misc_binding

<222> 96125..96144

<223> 5-262-49.mis1

<221> misc_binding

<222> 96146..96165

<223> 5-262-49.mis2 complement

<221> misc_binding

<222> 96161..96180

<223> 5-262-85.mis1

<221> misc_binding

<222> 96182..96201

<223> 5-262-85.mis2 complement

<221> misc_binding

<222> 96330..96349

<223> 5-262-254.mis1

<221> misc_binding

<222> 96351..96370

<223> 5-262-254.mis2 complement

<221> misc_binding

<222> 96931..96950

<223> 5-263-404.mis1

<221> misc_binding

<222> 96952..96971

<223> 5-263-404.mis2 complement

<221> misc_binding

<222> 97124..97143

<223> 5-265-244.mis1

<221> misc_binding

<222> 97145..97164

<223> 5-265-244.mis2 complement

<221> misc_binding

<222> 97256..97275

<223> 5-265-376.mis1

<221> misc_binding

<222> 97277..97296

<223> 5-265-376.mis2 complement

<221> misc_binding

<222> 102247..102266

<223> 99-7183-338.mis2

<221> misc_binding

<222> 102268..102287
<223> 99-7183-338.mis1 complement

<221> misc_binding
<222> 105917..105936
<223> 99-7207-138.mis2

<221> misc_binding
<222> 105938..105957
<223> 99-7207-138.mis1 complement

<221> misc_binding
<222> 255..301
<223> 99-1601-278.probe

<221> misc_binding
<222> 379..425
<223> 99-1601-402.probe

<221> misc_binding
<222> 449..495
<223> 99-1601-472.probe

<221> misc_binding
<222> 2932..2978
<223> 99-13801-100.probe

<221> misc_binding
<222> 12144..12190
<223> 99-13806-166.probe

<221> misc_binding
<222> 12513..12559
<223> 99-13799-376.probe

<221> misc_binding
<222> 17570..17616
<223> 99-13798-297.probe

<221> misc_binding
<222> 17583..17629
<223> 99-13798-284.probe

<221> misc_binding
<222> 22056..22102
<223> 99-1602-200.probe

<221> misc_binding
<222> 28941..28987
<223> 99-13794-186.probe

<221> misc_binding
<222> 28980..29026
<223> 99-13794-147.probe

<221> misc_binding
<222> 31054..31100
<223> 99-13812-384.probe

<221> misc_binding
<222> 31743..31789
<223> 99-13805-313.probe

<221> misc_binding
<222> 34768..34814
<223> 99-1587-281.probe

<221> misc_binding
<222> 45728..45774
<223> 99-1582-430.probe

<221> misc_binding
<222> 49824..49870
<223> 99-1585-465.probe

<221> misc_binding
<222> 49832..49878
<223> 99-1585-457.probe

<221> misc_binding
<222> 49863..49909
<223> 99-1585-426.probe

<221> misc_binding
<222> 49877..49923
<223> 99-1585-412.probe

<221> misc_binding
<222> 49883..49929
<223> 99-1585-406.probe

<221> misc_binding
<222> 49898..49944
<223> 99-1585-391.probe

<221> misc_binding
<222> 49916..49962
<223> 99-1585-373.probe

<221> misc_binding
<222> 50233..50279
<223> 99-1585-55.probe

<221> misc_binding
<222> 54932..54978
<223> 99-1607-373.probe

<221> misc_binding
<222> 64216..64262
<223> 99-1577-105.probe

<221> misc_binding
<222> 65413..65459
<223> 99-1591-235.probe

<221> misc_binding
<222> 65473..65519
<223> 99-1591-295.probe

<221> misc_binding
<222> 66944..66990
<223> 99-1572-315.probe

<221> misc_binding
<222> 66964..67010
<223> 99-1572-335.probe

<221> misc_binding
<222> 67069..67115
<223> 99-1572-440.probe

<221> misc_binding
<222> 67106..67152
<223> 99-1572-477.probe

<221> misc_binding
<222> 67206..67252
<223> 99-1572-578.probe

<221> misc_binding
<222> 67410..67456
<223> 5-264-188.probe

<221> misc_binding
<222> 67700..67746
<223> 5-169-97.probe

<221> misc_binding
<222> 67811..67857
<223> 5-169-208.probe

<221> misc_binding
<222> 67932..67978
<223> 5-169-331.probe

<221> misc_binding
<222> 68190..68236
<223> 5-170-238.probe

<221> misc_binding
<222> 68240..68286
<223> 5-170-288.probe

<221> misc_binding
<222> 68352..68398

<223> 5-170-400.probe

<221> misc_binding

<222> 68454..68500

<223> 5-171-156.probe

<221> misc_binding

<222> 68502..68548

<223> 5-171-204.probe

<221> misc_binding

<222> 68571..68617

<223> 5-171-273.probe

<221> misc_binding

<222> 68587..68633

<223> 5-171-289.probe

<221> misc_binding

<222> 70543..70589

<223> 5-1-60.probe

<221> misc_binding

<222> 70705..70751

<223> 5-1-222.probe

<221> misc_binding

<222> 80015..80061

<223> 99-1578-99.probe

<221> misc_binding

<222> 80095..80141

<223> 99-1578-179.probe

<221> misc_binding

<222> 80147..80193

<223> 99-1578-231.probe

<221> misc_binding

<222> 80160..80206

<223> 99-1578-245.probe

<221> misc_binding

<222> 80412..80458

<223> 99-1578-496.probe

<221> misc_binding

<222> 82067..82113

<223> 5-2-30.probe

<221> misc_binding

<222> 82142..82188

<223> 5-2-109.probe

<221> misc_binding

<222> 82146..82192
<223> 5-2-113.probe

<221> misc_binding
<222> 82195..82241
<223> 5-2-162.probe

<221> misc_binding
<222> 82211..82257
<223> 5-2-178.probe

<221> misc_binding
<222> 82245..82291
<223> 5-2-213.probe

<221> misc_binding
<222> 82370..82416
<223> 99-1605-112.probe

<221> misc_binding
<222> 83564..83610
<223> 5-3-27.probe

<221> misc_binding
<222> 83620..83666
<223> 5-3-83.probe

<221> misc_binding
<222> 83621..83667
<223> 5-3-84.probe

<221> misc_binding
<222> 83785..83831
<223> 5-3-248.probe

<221> misc_binding
<222> 83858..83904
<223> 5-3-321.probe

<221> misc_binding
<222> 83861..83907
<223> 5-3-324.probe

<221> misc_binding
<222> 83886..83932
<223> 5-4-313.probe

<221> misc_binding
<222> 83914..83960
<223> 5-3-377.probe

<221> misc_binding
<222> 83924..83970
<223> 5-4-351.probe

<221> misc_binding
<222> 83959..84005
<223> 5-4-386.probe

<221> misc_binding
<222> 83965..84011
<223> 5-4-392.probe

<221> misc_binding
<222> 84024..84070
<223> 5-260-255.probe

<221> misc_binding
<222> 84069..84115
<223> 5-260-300.probe

<221> misc_binding
<222> 84122..84168
<223> 5-260-353.probe

<221> misc_binding
<222> 85179..85225
<223> 5-9-50.probe

<221> misc_binding
<222> 86236..86282
<223> 5-5-21.probe

<221> misc_binding
<222> 86300..86346
<223> 5-5-85.probe

<221> misc_binding
<222> 87690..87736
<223> 5-202-95.probe

<221> misc_binding
<222> 87712..87758
<223> 5-202-117.probe

<221> misc_binding
<222> 87764..87810
<223> 5-202-169.probe

<221> misc_binding
<222> 87783..87829
<223> 5-202-188.probe

<221> misc_binding
<222> 87837..87883
<223> 5-202-242.probe

<221> misc_binding
<222> 87879..87925
<223> 5-202-284.probe

<221> misc_binding
<222> 87957..88003
<223> 5-202-362.probe

<221> misc_binding
<222> 87989..88035
<223> 5-202-394.probe

<221> misc_binding
<222> 88192..88238
<223> 5-7-113.probe

<221> misc_binding
<222> 88260..88306
<223> 5-7-181.probe

<221> misc_binding
<222> 88274..88320
<223> 5-7-195.probe

<221> misc_binding
<222> 88419..88465
<223> 5-7-340.probe

<221> misc_binding
<222> 88448..88494
<223> 5-7-369.probe

<221> misc_binding
<222> 88457..88503
<223> 5-7-378.probe

<221> misc_binding
<222> 89371..89417
<223> 5-181-57.probe

<221> misc_binding
<222> 89441..89487
<223> 5-181-127.probe

<221> misc_binding
<222> 89448..89494
<223> 5-181-134.probe

<221> misc_binding
<222> 89635..89681
<223> 5-181-321.probe

<221> misc_binding
<222> 92737..92783
<223> 5-10-39.probe

<221> misc_binding
<222> 93000..93046

<223> 5-10-302.probe

<221> misc_binding

<222> 93032..93078

<223> 5-10-334.probe

<221> misc_binding

<222> 93224..93270

<223> 5-11-158.probe

<221> misc_binding

<222> 93296..93342

<223> 5-11-230.probe

<221> misc_binding

<222> 93300..93346

<223> 5-11-234.probe

<221> misc_binding

<222> 93365..93411

<223> 5-11-299.probe

<221> misc_binding

<222> 93370..93416

<223> 5-11-304.probe

<221> misc_binding

<222> 93395..93441

<223> 5-11-329.probe

<221> misc_binding

<222> 93492..93538

<223> 5-12-56.probe

<221> misc_binding

<222> 93703..93749

<223> 5-12-267.probe

<221> misc_binding

<222> 93880..93926

<223> 5-13-145.probe

<221> misc_binding

<222> 94147..94193

<223> 5-14-44.probe

<221> misc_binding

<222> 94195..94241

<223> 5-14-93.probe

<221> misc_binding

<222> 94246..94292

<223> 5-14-144.probe

<221> misc_binding

<222> 94267..94313
<223> 5-14-165.probe

<221> misc_binding
<222> 94399..94445
<223> 5-14-297.probe

<221> misc_binding
<222> 94409..94455
<223> 5-14-307.probe

<221> misc_binding
<222> 94697..94743
<223> 5-15-219.probe

<221> misc_binding
<222> 94966..95012
<223> 5-16-157.probe

<221> misc_binding
<222> 95238..95284
<223> 5-17-140.probe

<221> misc_binding
<222> 95317..95363
<223> 5-18-51.probe

<221> misc_binding
<222> 95474..95520
<223> 5-18-208.probe

<221> misc_binding
<222> 95747..95793
<223> 5-300-238.probe

<221> misc_binding
<222> 95796..95842
<223> 5-300-287.probe

<221> misc_binding
<222> 96122..96168
<223> 5-262-49.probe

<221> misc_binding
<222> 96158..96204
<223> 5-262-85.probe

<221> misc_binding
<222> 96327..96373
<223> 5-262-254.probe

<221> misc_binding
<222> 96928..96974
<223> 5-263-404.probe

<221> misc_binding
<222> 97121..97167
<223> 5-265-244.probe

<221> misc_binding
<222> 97253..97299
<223> 5-265-376.probe

<221> misc_binding
<222> 102244..102290
<223> 99-7183-338.probe

<221> misc_binding
<222> 105914..105960
<223> 99-7207-138.probe

<221> misc_binding
<222> 1..18
<223> 99-1601.pu

<221> misc_binding
<222> 486..506
<223> 99-1601.rp complement

<221> misc_binding
<222> 2607..2627
<223> 99-13801.rp

<221> misc_binding
<222> 3035..3054
<223> 99-13801.pu complement

<221> misc_binding
<222> 11883..11902
<223> 99-13806.rp

<221> misc_binding
<222> 12313..12331
<223> 99-13806.pu complement

<221> misc_binding
<222> 12379..12399
<223> 99-13799.rp

<221> misc_binding
<222> 12889..12909
<223> 99-13799.pu complement

<221> misc_binding
<222> 17442..17462
<223> 99-13798.rp

<221> misc_binding
<222> 17868..17887
<223> 99-13798.pu complement

<221> misc_binding
<222> 21881..21899
<223> 99-1602.pu

<221> misc_binding
<222> 22487..22506
<223> 99-1602.rp complement

<221> misc_binding
<222> 28669..28689
<223> 99-13794.rp

<221> misc_binding
<222> 29131..29149
<223> 99-13794.pu complement

<221> misc_binding
<222> 30941..30961
<223> 99-13812.rp

<221> misc_binding
<222> 31437..31457
<223> 99-13812.pu complement

<221> misc_binding
<222> 31560..31579
<223> 99-13805.rp

<221> misc_binding
<222> 32057..32075
<223> 99-13805.pu complement

<221> misc_binding
<222> 34515..34535
<223> 99-1587.pu

<221> misc_binding
<222> 34890..34909
<223> 99-1587.rp complement

<221> misc_binding
<222> 45325..45343
<223> 99-1582.pu

<221> misc_binding
<222> 46000..46018
<223> 99-1582.rp complement

<221> misc_binding
<222> 49765..49784
<223> 99-1585.rp

<221> misc_binding
<222> 50291..50310

<223> 99-1585.pu complement

<221> misc_binding

<222> 54726..54746

<223> 99-1607.rp

<221> misc_binding

<222> 55307..55325

<223> 99-1607.pu complement

<221> misc_binding

<222> 64135..64153

<223> 99-1577.pu

<221> misc_binding

<222> 64518..64536

<223> 99-1577.rp complement

<221> misc_binding

<222> 65202..65219

<223> 99-1591.pu

<221> misc_binding

<222> 65815..65834

<223> 99-1591.rp complement

<221> misc_binding

<222> 66653..66671

<223> 99-1572.pu

<221> misc_binding

<222> 67275..67295

<223> 99-1572.rp complement

<221> misc_binding

<222> 67627..67646

<223> 5-169.pu

<221> misc_binding

<222> 68024..68043

<223> 5-169.rp complement

<221> misc_binding

<222> 67246..67263

<223> 5-264.pu

<221> misc_binding

<222> 67678..67696

<223> 5-264.rp complement

<221> misc_binding

<222> 67977..67994

<223> 5-170.pu

<221> misc_binding

<222> 68406..68424
<223> 5-170.rp complement

<221> misc_binding
<222> 68322..68340
<223> 5-171.pu

<221> misc_binding
<222> 68725..68742
<223> 5-171.rp complement

<221> misc_binding
<222> 70507..70524
<223> 5-1.pu

<221> misc_binding
<222> 70909..70928
<223> 5-1.rp complement

<221> misc_binding
<222> 79940..79957
<223> 99-1578.pu

<221> misc_binding
<222> 80557..80575
<223> 99-1578.rp complement

<221> misc_binding
<222> 82057..82077
<223> 99-1605.rp

<221> misc_binding
<222> 82484..82504
<223> 99-1605.pu complement

<221> misc_binding
<222> 82058..82077
<223> 5-2.pu

<221> misc_binding
<222> 82473..82492
<223> 5-2.rp complement

<221> misc_binding
<222> 83561..83578
<223> 5-3.pu

<221> misc_binding
<222> 83965..83982
<223> 5-3.rp complement

<221> misc_binding
<222> 83597..83616
<223> 5-4.pu

<221> misc_binding
<222> 83999..84017
<223> 5-4.rp complement

<221> misc_binding
<222> 83793..83812
<223> 5-260.pu

<221> misc_binding
<222> 84148..84167
<223> 5-260.rp complement

<221> misc_binding
<222> 85153..85170
<223> 5-9.pu

<221> misc_binding
<222> 85559..85576
<223> 5-9.rp complement

<221> misc_binding
<222> 86239..86257
<223> 5-5.pu

<221> misc_binding
<222> 86519..86539
<223> 5-5.rp complement

<221> misc_binding
<222> 87619..87638
<223> 5-202.pu

<221> misc_binding
<222> 88033..88050
<223> 5-202.rp complement

<221> misc_binding
<222> 88104..88122
<223> 5-7.pu

<221> misc_binding
<222> 88519..88536
<223> 5-7.rp complement

<221> misc_binding
<222> 89338..89357
<223> 5-181.pu

<221> misc_binding
<222> 89739..89758
<223> 5-181.rp complement

<221> misc_binding
<222> 92722..92741
<223> 5-10.pu

<221> misc_binding
<222> 93124..93142
<223> 5-10.rp complement

<221> misc_binding
<222> 93090..93108
<223> 5-11.pu

<221> misc_binding
<222> 93490..93509
<223> 5-11.rp complement

<221> misc_binding
<222> 93460..93478
<223> 5-12.pu

<221> misc_binding
<222> 93862..93881
<223> 5-12.rp complement

<221> misc_binding
<222> 93759..93776
<223> 5-13.pu

<221> misc_binding
<222> 94175..94192
<223> 5-13.rp complement

<221> misc_binding
<222> 94127..94144
<223> 5-14.pu

<221> misc_binding
<222> 94535..94554
<223> 5-14.rp complement

<221> misc_binding
<222> 94504..94521
<223> 5-15.pu

<221> misc_binding
<222> 94904..94921
<223> 5-15.rp complement

<221> misc_binding
<222> 94833..94850
<223> 5-16.pu

<221> misc_binding
<222> 95232..95251
<223> 5-16.rp complement

<221> misc_binding
<222> 95124..95142

<223> 5-17.pu

<221> misc_binding
<222> 95542..95561
<223> 5-17.rp complement

<221> misc_binding
<222> 95290..95308
<223> 5-18.pu

<221> misc_binding
<222> 95689..95708
<223> 5-18.rp complement

<221> misc_binding
<222> 95533..95551
<223> 5-300.pu

<221> misc_binding
<222> 95934..95952
<223> 5-300.rp complement

<221> misc_binding
<222> 96097..96115
<223> 5-262.pu

<221> misc_binding
<222> 96574..96591
<223> 5-262.rp complement

<221> misc_binding
<222> 96548..96565
<223> 5-263.pu

<221> misc_binding
<222> 96982..97001
<223> 5-263.rp complement

<221> misc_binding
<222> 96901..96918
<223> 5-265.pu

<221> misc_binding
<222> 97292..97309
<223> 5-265.rp complement

<221> misc_binding
<222> 102156..102176
<223> 99-7183.rp

<221> misc_binding
<222> 102584..102604
<223> 99-7183.pu complement

<221> misc_binding

<222> 105570..105588
<223> 99-7207.rp

<221> misc_binding
<222> 106056..106074
<223> 99-7207.pu complement

<221> misc_feature
<222> 86434
<223> diverging nucleotide G in reference genbank : L78132

<221> misc_feature
<222> 86435
<223> diverging nucleotide T in reference genbank : L78132

<221> misc_feature
<222> 88355
<223> diverging nucleotide C in reference genbank : L78132

<221> misc_feature
<222> 92976
<223> insertion of G in reference genbank : L78132

<221> misc_feature
<222> 93240
<223> diverging nucleotide T in reference genbank : L78132

<221> misc_feature
<222> 93471
<223> diverging nucleotide G in reference genbank : L78132

<221> misc_feature
<222> 93592
<223> diverging nucleotide C in reference genbank : L78132

<221> misc_feature
<222> 93680
<223> diverging nucleotide C in reference genbank : L78132 \

<221> misc_feature
<222> 93681
<223> diverging nucleotide C in reference genbank : L78132

<221> misc_feature
<222> 93682
<223> diverging nucleotide C in reference genbank : L78132

<221> misc_feature
<222> 93683
<223> diverging nucleotide G in reference genbank : L78132

<221> misc_feature
<222> 93712
<223> deletion of A in reference genbank : L78132

<221> misc_feature
<222> 93728
<223> diverging nucleotide C in reference genbank : L78132

<221> misc_feature
<222> 93747
<223> diverging nucleotide T in reference genbank : L78132

<221> misc_feature
<222> 93761
<223> diverging nucleotide C in reference genbank : L78132

<221> misc_feature
<222> 94151
<223> deletion of TTA in reference genbank : L78132

<221> misc_feature
<222> 94154
<223> diverging nucleotide C in reference genbank : L78132

<221> misc_feature
<222> 94241
<223> insertion of G in reference genbank : L78132

<221> misc_feature
<222> 94430
<223> diverging nucleotide C in reference genbank : L78132

<221> misc_feature
<222> 94771
<223> insertion of A in reference genbank : L78132

<221> misc_feature
<222> 94805
<223> insertion of T in reference genbank : L78132

<221> misc_feature
<222> 95121
<223> deletion of AG in reference genbank : L78132

<221> misc_feature
<222> 95126
<223> diverging nucleotide A in reference genbank : L78132

<221> misc_feature
<222> 95130
<223> deletion of G in reference genbank : L78132

<221> misc_feature
<222> 95134
<223> deletion of G in reference genbank : L78132

<221> misc_feature
<222> 95149
<223> deletion of A in reference genbank : L78132

<221> misc_feature
<222> 95155
<223> deletion of A in reference genbank : L78132

<221> misc_feature
<222> 95174
<223> deletion of AA in reference genbank : L78132

<221> misc_feature
<222> 95368
<223> deletion of A in reference genbank : L78132

<221> misc_feature
<222> 95411
<223> deletion of C in reference genbank : L78132

<221> misc_feature
<222> 95419
<223> deletion of C in reference genbank : L78132

<221> misc_feature
<222> 95431
<223> insertion of TG in reference genbank : L78132

<221> misc_feature
<222> 95435
<223> insertion of C in reference genbank : L78132

<221> misc_feature
<222> 95444
<223> diverging nucleotide G in reference genbank : L78132

<221> misc_feature
<222> 95445
<223> diverging nucleotide C in reference genbank : L78132

<221> misc_feature
<222> 95534
<223> insertion of A in reference genbank : L78132

<221> misc_feature
<222> 95678
<223> insertion of G in reference genbank : L78132

<221> primer_bind
<222> 67820..67850
<223> 5-169-208_A_AS complement

<221> primer_bind
<222> 67820..67848
<223> 5-169-208_A_S

<221> primer_bind
<222> 67820..67850

<223> 5-169-208_G_AS complement

<221> primer_bind

<222> 67820..67848

<223> 5-169-208_G_S

<221> primer_bind

<222> 67941..67969

<223> 5-169-331_C_AS complement

<221> primer_bind

<222> 67940..67969

<223> 5-169-331_C_S

<221> primer_bind

<222> 67941..67969

<223> 5-169-331_T_AS complement

<221> primer_bind

<222> 67940..67969

<223> 5-169-331_T_S

<221> primer_bind

<222> 67709..67738

<223> 5-169-97_C_AS complement

<221> primer_bind

<222> 67707..67737

<223> 5-169-97_C_S

<221> primer_bind

<222> 67709..67738

<223> 5-169-97_G_AS complement

<221> primer_bind

<222> 67707..67737

<223> 5-169-97_G_S

<221> primer_bind

<222> 68199..68228

<223> 5-170-238_A_AS complement

<221> primer_bind

<222> 68198..68227

<223> 5-170-238_A_S

<221> primer_bind

<222> 68199..68228

<223> 5-170-238_G_AS complement

<221> primer_bind

<222> 68198..68227

<223> 5-170-238_G_S

<221> primer_bind

<222> 68249..68277
<223> 5-170-288_A_AS complement

<221> primer_bind
<222> 68247..68277
<223> 5-170-288_A_S

<221> primer_bind
<222> 68249..68277
<223> 5-170-288_C_AS complement

<221> primer_bind
<222> 68247..68277
<223> 5-170-288_C_S

<221> primer_bind
<222> 68463..68492
<223> 5-171-156_G_AS complement

<221> primer_bind
<222> 68463..68491
<223> 5-171-156_G_S

<221> primer_bind
<222> 68463..68492
<223> 5-171-156_T_AS complement

<221> primer_bind
<222> 68463..68491
<223> 5-171-156_T_S

<221> primer_bind
<222> 68511..68539
<223> 5-171-204_C_AS complement

<221> primer_bind
<222> 68511..68539
<223> 5-171-204_C_S

<221> primer_bind
<222> 68511..68539
<223> 5-171-204_T_AS complement

<221> primer_bind
<222> 68511..68539
<223> 5-171-204_T_S

<221> primer_bind
<222> 68580..68608
<223> 5-171-273_A_AS complement

<221> primer_bind
<222> 68580..68608
<223> 5-171-273_A_S

```
<221> primer_bind
<222> 68580..68608
<223> 5-171-273_G_AS complement

<221> primer_bind
<222> 68580..68608
<223> 5-171-273_G_S

<221> primer_bind
<222> 68596..68626
<223> 5-171-289_C_AS complement

<221> primer_bind
<222> 68596..68624
<223> 5-171-289_C_S

<221> primer_bind
<222> 68596..68626
<223> 5-171-289_T_AS complement

<221> primer_bind
<222> 68596..68624
<223> 5-171-289_T_S

<221> primer_bind
<222> 68361..68389
<223> 5-171-54_C_AS complement

<221> primer_bind
<222> 68360..68389
<223> 5-171-54_C_S

<221> primer_bind
<222> 68361..68389
<223> 5-171-54_G_AS complement

<221> primer_bind
<222> 68360..68389
<223> 5-171-54_G_S

<221> primer_bind
<222> 66953..66983
<223> 99-1572-315_C_AS complement

<221> primer_bind
<222> 66951..66981
<223> 99-1572-315_C_S

<221> primer_bind
<222> 66953..66983
<223> 99-1572-315_T_AS complement

<221> primer_bind
<222> 66951..66981
<223> 99-1572-315_T_S
```

<221> primer_bind
<222> 66973..67002
<223> 99-1572-335_A_AS complement

<221> primer_bind
<222> 66973..67001
<223> 99-1572-335_A_S

<221> primer_bind
<222> 66973..67002
<223> 99-1572-335_G_AS complement

<221> primer_bind
<222> 66973..67001
<223> 99-1572-335_G_S

<221> primer_bind
<222> 67078..67106
<223> 99-1572-440_C_AS complement

<221> primer_bind
<222> 67078..67106
<223> 99-1572-440_C_S

<221> primer_bind
<222> 67078..67106
<223> 99-1572-440_T_AS complement

<221> primer_bind
<222> 67078..67106
<223> 99-1572-440_T_S

<221> primer_bind
<222> 67115..67144
<223> 99-1572-477_A_AS complement

<221> primer_bind
<222> 67113..67143
<223> 99-1572-477_A_S

<221> primer_bind
<222> 67115..67144
<223> 99-1572-477_T_AS complement

<221> primer_bind
<222> 67113..67143
<223> 99-1572-477_T_S

<221> primer_bind
<222> 67215..67247
<223> 99-1572-578_C_AS complement

<221> primer_bind
<222> 67212..67243

<223> 99-1572-578_C_S

<221> primer_bind

<222> 67215..67247

<223> 99-1572-578_T_AS complement

<221> primer_bind

<222> 67212..67243

<223> 99-1572-578_T_S

<221> misc_feature

<222> 8187,14867,14970,29204,29487,34266

<223> n=a, g, c or t

<220>

<221> misc_feature

<222> (8187)..(34266)

<223> n=a, g, c or t

<220>

<221> misc_feature

<222> (67092,68525, 82234, 82393)..()

<223> polymorphic base; y=C or T

<400> 12

| | | | | | | |
|-------------|-------------|-------------|-------------|-------------|-------------|------|
| ttggcttggc | agggcaacca | gctcaccaga | ctctctgcag | acccgaagtc | attacataca | 60 |
| gtatgataac | aggggaatgga | cccgaccagc | atcttgcagg | gatgatatac | ggtgtcagcc | 120 |
| cgacaggccc | ctacctgctt | ctcttgatat | gcaggaaacc | cttcaagctc | caacaagatc | 180 |
| tgtttaatag | actggagagt | cctttagttc | cttccctctaa | gggaaaatca | gacggttctg | 240 |
| gtttgcttgg | taactcctta | cttcacccct | gatgggaagt | ttatagaatg | aggaaccagg | 300 |
| gctattacat | gaaactataa | aactgcctag | agcacatact | tggtattttt | aacattgttg | 360 |
| agaggggactc | acttaattca | gccttgcagc | tattgcattc | cwgtccaaac | caacggcagg | 420 |
| ttctcaaaaac | aagcgggtgaa | aggggttcctg | ttgcagagct | gtctggacat | ttaaagaagg | 480 |
| gagaggaaaat | ctcaaggggt | cgggttgcact | ggaatagaaa | tcgcctgttc | tttttttttg | 540 |
| agacggagtc | tcgctctgtc | acccaggetg | gagagcagtt | gcgcgatctt | tgctcactgc | 600 |
| aacctctgcc | tcccgggttc | acgccattct | cctgcctcag | cctcctgaat | agctgggact | 660 |
| acaggcgccc | gccaccacgt | ctggctcatt | ttttgtattt | ttagtagaga | tggagtttca | 720 |
| ccatttttagc | caggatgggtc | tcgatctgct | gaccttgtaa | tccaccgcgc | tcggcctccc | 780 |
| aaagtacagg | gattataggg | gtgagccacc | gcgccaggt | gcctgttctt | tttttaagag | 840 |
| tctcactctg | tgcgccaggc | tggcgtgcag | tggcgcgac | ctctgttact | gcagtctccg | 900 |
| tctcctgagt | tcaaatcaag | cgagaaatca | cttgttctct | tctgtgaacg | gaagcatcgc | 960 |
| agatctctct | tggcctcaca | ctcctccatc | tccctgattc | ctctgttctt | catttaccta | 1020 |
| ccttcccagc | agtctgcaga | gctggccgct | cactcacctc | tagtaagggg | atggagggtc | 1080 |
| ctgtgttgga | ataactcact | gaccgctaga | aagttaaaaa | taaatgggta | atgccaggag | 1140 |
| aacttggctg | gtgccttaaa | agccatagaa | cttctctttc | catctgtaga | taactgtaga | 1200 |
| caattttgtc | caaaacagat | aatgatctga | ttctacctcc | cattgggtatt | tcccttcttc | 1260 |
| ggcctgtgac | atctcacttt | ctctagactg | aactttatcc | cagactgtga | ccttgccatg | 1320 |
| accttccctc | tgcgtgtgcc | tctgccacca | caggaatggc | cacgcctcag | atcatgtcac | 1380 |
| cgctgggaac | aaaccctcta | cctgcgactc | tgaagtctcc | tctctgaccc | tcttttcttt | 1440 |
| cttccccctc | ccccctccct | cactccctct | gcacctgtgt | ttcgctgtca | cgctcccaac | 1500 |
| tcacccctgt | agagctgggtg | aagagatgct | gatgtagtct | ttgaccttga | acccagagcc | 1560 |
| tgcagccgtc | ctgtggcctc | actgacccag | cgctcatgcc | tgggtcaagca | ttttgggtgat | 1620 |
| gctcttgggtg | atcttcaatg | ggacctgect | tgcgaagccc | tgggcttagg | tgaaccagga | 1680 |
| ccacctgcat | tctatgtttt | tgattgctgg | aaaaaaatca | tgaatgttca | actgtttgtc | 1740 |
| tcatttttcc | cactgccagt | tcctgctacc | caacctccgc | cctcatttca | aggccttgag | 1800 |

| | | | | | | |
|-------------|-------------|-------------|-------------|-------------|-------------|------|
| tacttttttt | ctatagtga | gtctcccaa | aatgatattt | ttttaaaaa | gaaaagccat | 1860 |
| agtactctga | tttgatgtg | tctgttaata | cctatgggct | ttgacttggt | tctgctttta | 1920 |
| gacctagaca | aaataaaaata | tctgtggtaa | aacatattca | agttttaccgg | gcacgggggc | 1980 |
| tcacgcctgt | aatcccagca | ctttgggagg | ctggggcagg | cagatcactt | gagcccagga | 2040 |
| gtttgagacc | agcctgggca | acagggtgaa | acaacatctc | tacaaaaata | caaaaaatac | 2100 |
| ctgggcattg | tgggtgcatgc | ctgtagtcgc | agctactcgg | gagactgagg | tgggaggatg | 2160 |
| gcttgagctc | tggaggcgga | ggtcatagtg | agccaagatc | gtgccactga | actccagcct | 2220 |
| gggcaacaga | ggcagattct | ttctctctaa | aaaacataaa | ataaaaaaag | gccaggcgca | 2280 |
| gtggctcaca | cctgtaatcc | cagcactttg | ggaggctgag | gggggcggac | gaagagggtca | 2340 |
| ggagatagag | accatcctgg | ccaacatggg | gaaacctgc | ctctactaaa | aatacaaaaa | 2400 |
| ttagccgggt | gtagtgtg | atgcctgtaa | tctcaactac | tcaggaggct | gaggcaggaa | 2460 |
| aatcgcttga | acccaggagg | cggaggctgc | agtgaacca | gatcgacca | ctgcaactca | 2520 |
| gcctgggtga | cagagcaaga | ctctgtcccc | cacaaaaaaa | aataaataaa | taaatcaggc | 2580 |
| caaagggcaa | aaatgcttgc | tttttagcac | ttagtgttta | tttccccaa | aagagcggga | 2640 |
| gagaagttta | ttaataatga | aactggacag | ttctttatca | gctctaattg | tttgactcaa | 2700 |
| tggtttctct | tctcattacc | atgcagtgtc | ctgctggctg | caatgccttt | gaacttcaca | 2760 |
| agaaggttag | aatttcaactg | agacattcgg | atgggtgtgg | tgtcagggtg | cagctctcac | 2820 |
| acatagttga | gagtgtaaat | tgatacaact | ttatggaaaa | ttaattggga | gtacccattc | 2880 |
| acactcctgt | ctagcaatct | cactttaagg | acttgatcct | acagaactca | ttacatgggtg | 2940 |
| caaggttcac | agtgtggcat | tcaaaataga | gaagagctgc | gggtaactcc | catgcccgtt | 3000 |
| ggcaggaact | ggttgaataa | attatgggtg | atcagtgtctg | tggggtatca | ttaaaccatt | 3060 |
| aaaaagaaga | gagagtcctg | gccttaaaaa | aaacttatct | gatgtattgt | taaacagata | 3120 |
| aagcaagtgt | tagatcaatg | tgatttgggg | ctaaaaaaat | atttctatat | aggtgtgaac | 3180 |
| atggccatga | ctaagggaatc | aggaagggaag | tacctagatt | gtaaccagta | acatgtcggg | 3240 |
| agtgagatgg | gattgagaga | cgtaataata | gattgagaga | aaaagatttt | cccatctctt | 3300 |
| tttgattttt | taagaaaaca | gcatgatttt | cagtaatttt | tacttttgtg | tgtttttggt | 3360 |
| attttttctt | tttctttttt | tttttttttt | ttttgagacg | gagtttcaact | cttgttgccc | 3420 |
| aggctggaat | gcgatggccc | agtcccagct | cactgcaacc | ttcaacttccc | aggttcaaga | 3480 |
| gattctcctg | tctcagcctc | ccgagtagct | gggattacag | gcccctgcca | ttacgcccag | 3540 |
| ctactttttg | tatttttagt | agagatgggt | ttcacctgtg | tggttaggct | ggtttgaact | 3600 |
| cctgagctca | ggcgatctgc | ctacttcagc | ctcccaaaat | gctgggatta | cagccgtgag | 3660 |
| ccaccgcccc | cagccggtat | tttttcaa | caaagaaaaa | ataatagagt | aatcatcca | 3720 |
| aaacttttaga | tgggtatttag | actcagtaaa | cttttcatat | atgacagatg | aagccaaatg | 3780 |
| gtctttctgt | gcagtcagct | agcacacaat | tgtgcacccg | aggaaaatta | gagactgaac | 3840 |
| cggggtgtct | gtggatgcat | ttcctcagca | ttcagccttc | cttttgccc | tgttctagca | 3900 |
| ttactttctgt | cctacagcct | gggattttgtg | aatgaaatag | acagggtgcaa | aaactccctg | 3960 |
| cctgtctgta | atatccatag | ccccgtgctc | tacttgtatt | tgcatgtaca | aaccataatc | 4020 |
| tctgttaaaa | tactctgtga | tatttctgaa | taataataaa | ctctacatcc | tacacaaagg | 4080 |
| caaaacccct | gtatctttca | tctttgaaac | catagcaaag | gtatgaaatt | acacctgagc | 4140 |
| atgcctggcc | tcaaagtcct | ggaacgggta | tgtctttgac | cctcacttca | actcaactcc | 4200 |
| agaagaagca | ggtcttctct | gtaattggat | agaaaaactca | ttgtagagaa | gaaagatcta | 4260 |
| cagggtcaaga | aacccacagg | tttgctgtaa | tccgagcaaa | gcactgtagc | atttatttta | 4320 |
| tattttcaact | cttcttattt | agctcttttt | tttttttttt | ttttgagatg | gagtttcatt | 4380 |
| cttgtcaccc | agcctggagc | aatgggtgcca | tctcggtcca | ctgcaacctc | tgcctcccag | 4440 |
| gttcaagtga | ttctcctgcc | tcagcctcct | gagtagctgg | ggttacaggc | ttccaccgcc | 4500 |
| acaccagccc | aattttttgt | attttttagta | gagacggggt | ttcaccatgt | tagccagact | 4560 |
| gggtctcaaac | tcttgccctt | aggtgatcca | ccgcctcag | catcccaaag | tgtgggatt | 4620 |
| acaggcgcac | cggccttagc | tcttttatcc | ttaatgaaat | gctcctcatt | ccctgagggtc | 4680 |
| tcacttgaat | tcttgccac | ctctggggtg | ccttctctct | ctgtctgtgc | tttgtaacac | 4740 |
| gtgggttcctt | atgatgtcaa | tatttatgca | tatgtcttca | ttccattact | ggattataat | 4800 |
| cttgaagcaa | cagatttttg | tctctatatc | ccagagccta | gaatggattc | ttacactggg | 4860 |
| cagtaagtac | ttaataaatg | tatcccaaat | caaataaata | catttcttct | ttttcttttc | 4920 |
| tttttttttt | ttttttgaga | cagggttcca | ctctgtcacc | caggctggag | tgtaatgaca | 4980 |
| tgatctcagc | ttactacagc | ctcaatctcc | tgggcttaag | caatcctccc | acctcagcct | 5040 |
| cccacatagc | taggactaca | ggcgctcacc | acaacacctc | atttttgtat | attttttcta | 5100 |

| | | | | | | |
|-------------|-------------|-------------|-------------|-------------|-------------|------|
| gagattgggg | gatctcacta | cgttgccccg | gctggttttg | aacttctggg | ctcagacaat | 5160 |
| ccaccacact | tggcctccca | aactggtgag | attacaggaa | tgagccacca | ttccctggcc | 5220 |
| aaatacattt | ctaaaagcca | gtttctggag | tatactgtca | aataatagat | atatgtccac | 5280 |
| atTTTTat | ggacttatat | tgtaagaaaa | agtaaaaaata | agtgtgaagt | tattacagta | 5340 |
| atagtaatta | ttttgcagaa | aaagaactga | gtttaaacag | gctttttaga | aaaacccaac | 5400 |
| aggagattca | cagtctggta | ctaactgtta | gacatggatc | atcagtaaat | gtgttccaaa | 5460 |
| gagttacaca | gataccagct | ttgtcttggg | aattcttacc | cctgaaaatt | gattgactat | 5520 |
| cactgactgt | gtgacatgag | aaagttttgt | ggggtttttt | ttttgtattt | ttttgagacg | 5580 |
| tatcttgctc | tgtaacccaa | gctggagtc | actggcgaga | tcttggetca | ctacaacctc | 5640 |
| tgccgcctgg | ttcaagcgat | tctcctgcct | cagcctccag | aatagctgcg | attacaggca | 5700 |
| cctgccacca | tgcccggtta | atTTTTgtat | ttttagtaaa | gacgggggtt | catcgtgttg | 5760 |
| gccaggatgg | tcttgaactc | ctgacctcag | gtgatctgcc | cacctcagcc | tcccaaagtg | 5820 |
| ctgggattac | aggcatgagc | caccgtgccc | agcctgaaaa | agttttgaac | ggtctaaatc | 5880 |
| catatgctgt | gaatcctatt | accatcacac | acttaggcct | ttaaaatcat | atTTTcaagg | 5940 |
| ccaggctactg | aaatatTTTc | tgcaagcaga | gagatcaaac | tttagcattg | ttattcttgt | 6000 |
| agtagtttca | tagtttgagg | tcttagattt | aagtcttcca | ttgattttga | tttgattttt | 6060 |
| gtatatggag | ataggggtct | agtttcatte | ttttgcatat | ggatatccag | ttttcccagc | 6120 |
| accattttatt | gaagagactg | tctttttcac | cagtgtatgc | tcttggcacc | ttcgtcaaaa | 6180 |
| atgagttccc | tgtaggtgtg | tgggtttgct | tctggttctc | tattctgtcc | cattggtcta | 6240 |
| agtgtttggt | tttatgctac | taccatgctg | gttggtatag | ctctgcagta | taacttgaaa | 6300 |
| gcaggtaatg | tgattccaaa | gaagctagtt | aagtaattga | gctaaactgg | aacctcaggt | 6360 |
| gtagaagtca | taagcgtggg | gagcgtttct | tctcaggttc | tctgcctata | atTTtagtttg | 6420 |
| ccacaccaga | tgaacagtga | caacttggtc | ttggtgttcg | tggtgggttc | caaccaactc | 6480 |
| ttggtcataa | caggtgaacc | agcctggggc | atgctttccc | attcggttat | cctccccata | 6540 |
| gtttgcaaag | tagcaaagat | gaactcttca | tgagttggct | aagcatagac | atTTcaagac | 6600 |
| caaactaaac | gtcctgaaga | gcatgtttca | cagaaaacta | gcccctaagg | gaccagtggg | 6660 |
| ggctgtcaga | gaacaagggt | tcaacgtact | gagttttaaa | gatctaattg | gcttttaata | 6720 |
| acaattcatg | aaccaggcac | catagtctac | aaaatagaca | gggtttctgc | tgggcactgc | 6780 |
| aggacagttg | gtttttggaa | ggtggcttga | gcaggaacaa | ggaaaaagca | ccgtgccaa | 6840 |
| agtggattgg | ttaacatcag | gggacttcgg | gtgactttcc | ttctatgggt | taaagcaag | 6900 |
| gggacttccc | tagcatgtca | gctcaggttg | actgggcccc | tttggtttgg | ttgctgtgaa | 6960 |
| tctcctagtt | ttttttgttt | tgggttgggt | tgggtctttt | ggggaaaacg | ggccagtttg | 7020 |
| gagattcagc | tattattttct | ctctcctgat | atcagaagat | cagatcttat | gagtacacag | 7080 |
| ctgaggtttt | gggttgggtga | tgtggaaccc | tgggtgtgagt | gactccattt | tgggttgggtc | 7140 |
| tattgggggtc | tcggtgcagg | agctcagtc | aaatcagttg | cctctcctca | tttttatttg | 7200 |
| acttctccat | caatctatcc | gtgtctcccc | tcacatcagt | ccattcccc | gtgggctgca | 7260 |
| cattcagctc | ggagctgaga | gcttttccca | gggtgtgccc | tggggttttct | gctgcttgca | 7320 |
| gcctgatatt | aaatctcagg | tgtaaatctt | cagaggcaac | tgttccttag | taccagagc | 7380 |
| tttcagctcc | ctgagcagaa | atgggacttg | actgtcagtt | tataaactaa | ccaaggtgtg | 7440 |
| aaattcatgc | aacttagccg | actttctggt | caaagaattc | ttggcagcag | ttaatacatt | 7500 |
| ttgcccataa | ataagataat | tcccttgtac | tcacaatgag | aaagttttac | aaaatggggg | 7560 |
| ttttcttttag | tttacttgaa | tataaaacat | agggtgtcca | ctctgcagta | ccttaacagt | 7620 |
| tcttaaggag | atgtttgaaa | caacccatgt | ccaggcctca | cacctcgcca | attaaataaa | 7680 |
| tgagaagttc | ttcccagcca | gtgttaagaa | aaattaacat | caagttttag | gaaggtagac | 7740 |
| agattatgca | aatgcatacc | tatatgattt | aagttattac | attaatttac | acacacatat | 7800 |
| ttaaaatcat | agattaatct | aatttagaga | tgtgcattt | tttccatctc | tctgttttca | 7860 |
| taaatgttat | tcacacggca | tttctctgct | atcctcgga | tagtgtttgt | atcgtgtcac | 7920 |
| tctggcacgg | ggctctacag | aacatgtcga | gcgtgttgcc | ttccctactg | cccacatcgt | 7980 |
| ttgagagaac | acatttttaa | cattttttta | ttgtggtaaa | atacacataa | cataaaagtt | 8040 |
| acgattttta | ccttttttaa | ctctgtcatc | caggctggag | tgcagtggcg | agatcttgggt | 8100 |
| tcactgcaac | ctccgcctcc | taggtccaag | tgattctcct | gcctcagcct | tccgagtagc | 8160 |
| tgggattaca | ggtgcacacc | accacgnccg | gctaattttg | tatttttagt | agatgcgggg | 8220 |
| tttcaccatg | ttagccaggt | tgggtctcgaa | ctcccgacct | caggtgatca | gcccgcctcg | 8280 |
| cctccccagt | gctgggatta | caggcgtgcg | ccactgtgcc | gggcccattt | taaccacttt | 8340 |
| taagtgcaca | gttcagtggc | attaagtata | ttcgcggtgt | tgtgcgaccg | tcaccacat | 8400 |

| | | | | | | |
|-------------|-------------|--------------|-------------|-------------|-------------|-------|
| tcacctccag | aactttctctg | tcttcccaaa | ctgaaattct | gtacccattg | aacggtaact | 8460 |
| ccccattccc | cattttctgct | tcctaggccc | tgacatggag | gctgggccaa | cggatatctc | 8520 |
| acctcccttc | aggcttctcc | agatttgccc | ccgtttttct | ccctctttgt | cccatctcca | 8580 |
| aagaaatggt | gtcttttcat | catcaaggtc | catcccttgc | tccttgaata | cactccaggc | 8640 |
| ccagtggaac | aggcatcctg | tgggggtgcac | ggacaggggtg | cctggggaac | acccagggca | 8700 |
| cagaaccag | accggggggt | tggagaaggt | gtcctagcag | aagtgatgtc | taagctgagg | 8760 |
| ccctacagat | aagagaaagt | aagcagatga | aagggctggg | gagggtagga | tttcaggcct | 8820 |
| acacaaccac | acgcgtgttc | ttcagccatc | tccatggcct | cactgcccac | ctgggtatcag | 8880 |
| ccggccacca | ccgggctaga | acggctttca | aaatcgctgc | tcgtctactc | ctcaccaaat | 8940 |
| cttgtcttca | cttgggtgctc | aagcccatca | cctttctgca | agtattatct | tttttttttt | 9000 |
| ggagatggag | tctcgctctg | tcacccgggc | tggagtgcag | tggttcaatg | atagctcact | 9060 |
| gcaaccttga | actcctgggc | tcaagatcct | cttgccacag | cctcccaaag | tgctgagatt | 9120 |
| acaggcacaa | gccaccatgc | gtggtccttg | ctgcaacttt | tttttttttt | tttttttttt | 9180 |
| ttttgagaca | gaatctcgct | ctgtcgctca | ggctggagtg | cagtgggtgtg | atctcggtctc | 9240 |
| aatgcaacct | ccgcctccc | gggttcagggtg | attctcctgc | ctcacccctcc | tgagtagcta | 9300 |
| ggaacacagg | cgctcaccac | cacatccagc | taattttttgt | gttttttagta | gagccgggggt | 9360 |
| tttgccatgt | tggccagggt | tctctcaaac | tcctggacct | cgggcgattg | gcccgcctcg | 9420 |
| gcctcccaaa | atgctggaat | tacaggcatg | agccaccgtg | cctggccatt | tgctgcaact | 9480 |
| tttgacactg | ctccccctgc | ttttcttccc | ctctctgacc | tcctttctct | gctgtccttt | 9540 |
| cgttccttcc | tctgccactg | aagtgtcctt | ctcaggctct | tctcaagggt | gtgaccttac | 9600 |
| agctgtctct | tcacttccag | tcatttcttt | cataatcact | ttgacatcct | tatttttcac | 9660 |
| tcctgccttg | gcctctccca | gggaccaggga | ccatgcattc | agctcctggg | ggcatctcaa | 9720 |
| gcttgttctg | tgtgagctcg | cccttgttgt | ctctccgtgc | acctcttcac | agcttgcctc | 9780 |
| gcattttcacc | tcctttcctg | ttttccccc | tgtatcgcatc | tctacagcgg | ctctcacttc | 9840 |
| atcccccttct | ctcctagagg | agtgatgcgg | agtctcatta | atccttgctt | atgtcattct | 9900 |
| tcctcccttct | ctgtccatca | cctccacatg | tcctgttccc | ccatgcgtcc | tacactgtag | 9960 |
| ccagggtgggt | atttccctgtg | ctggctcttag | acaccccttg | aggataccct | gcttcaggcg | 10020 |
| agagccctca | gtgactccct | gttgtccgga | atgacgtcca | gctccttggg | cagtccccag | 10080 |
| tgtattcacc | tgtctcatct | ccttcttttt | gttttgtttg | tttttcttaa | cttccagccc | 10140 |
| gattttctgaa | tcattctcct | cttgcccttc | ccattgcctt | tgcttaagac | taaagtctcc | 10200 |
| ttcctcccaa | gtccccactg | cccagatttc | agcagggtcc | atctcaaaca | tgtctgtctc | 10260 |
| caagaaactg | cctctgattt | ttttcataag | aagacacctg | tcctctctga | cttcatctgt | 10320 |
| acctctctct | tgggaagtcac | tatcttgtgc | cttgcatttt | cgttgtttta | gtgggtctcca | 10380 |
| tttcccagca | tatcttgagg | tcaagggttc | aggtcatttt | atctttgtct | atgcattgca | 10440 |
| atatgggggt | ttttacatat | tagctgtctca | ataaatcggt | gttgaataaa | ggcatgtgta | 10500 |
| tgctttcatt | aagactatga | aaccacaaaa | aatcagtggt | tttccctatt | caccttaga | 10560 |
| aaacaaaccc | acaacatagc | acaacctgat | attcagagct | aagaacaaa | gtcatgcata | 10620 |
| ttaatctaaa | ttctatcttt | atcaactttc | acaagtaatt | cgtattttcc | tgtctgcate | 10680 |
| acggggatga | ttctggccag | acattgacct | tggtaaaatt | tcctccagat | tatgagaaat | 10740 |
| caagtcaaat | atgccaagta | acatagtttc | tacttagagt | caggttcatg | tttttagcagg | 10800 |
| aacctcaaat | accacaaaat | ctgtcaagtt | ctaacatttg | tatctctcga | cagtacctga | 10860 |
| agttcctgtt | tctgtttcct | cagcccagggt | ttccaattca | gtgagcagaa | cgggtgactgt | 10920 |
| gttggtaaaa | gagccacat | acctgcccga | tcctgcagga | gtgttgagaa | tgcaaacagg | 10980 |
| cgggtctcca | catgacctgc | ggagtaatga | ctagtgtccc | taaagtcatg | gggcttctgg | 11040 |
| ggttagcctt | gaaaaaagct | aaagggttga | tagagagaga | tttctatccg | ttcagagact | 11100 |
| cactataatt | ctctctttct | gtctctgtcc | ttcatctgtt | tctctctttc | tctctcactc | 11160 |
| tctctctctg | atacacacac | acacacacac | acacacacac | actcacactc | acacactcct | 11220 |
| gagtaaggga | aatgtgagaa | gaaggtaaaa | cttcaactaa | atgaaaagaa | attgtatgaa | 11280 |
| ttatggtaag | cagggttggtt | tttagttcca | gtaaagatag | aaatatttag | attacttagg | 11340 |
| agaaaagtct | agctggtaac | acatgggaat | gtgcctgtgt | gaaaacaaaa | caaaacaaaa | 11400 |
| aatctaggct | tgtgggttagg | tgaaggatatg | tacactgctg | agacatggcg | atgggtgagc | 11460 |
| ttgggatgag | gagaaaggct | tctctgagaa | gattaagaga | gaaagattgt | ttaaaaatgt | 11520 |
| ttaaaccatgc | tgggcactgt | ggctcacacc | tgtaatccca | acactttggg | aggccaagggt | 11580 |
| gggcgatca | tgaggtcagg | agttcgagac | catcccgcc | aacatggtga | aacctgtct | 11640 |
| ctgctaaaaa | tacaaaaatt | agccaggcgt | gggtggcgggt | ggctgtagtc | ccagctactt | 11700 |

| | | | | | | |
|-------------|-------------|-------------|-------------|-------------|-------------|-------|
| gggaggctga | ggcaggagaa | tggcgtgaac | ccaggaggcg | gagatgcagt | gagccgagat | 11760 |
| tgtgccactg | cactccagcc | tgggcgacag | agcaagactc | cgtctcaaaa | aaaacaaaaa | 11820 |
| aacaaaaaaa | aaacacacat | tgacaccagg | acggagttag | cacatcttta | caggtgagac | 11880 |
| tctcagaccc | gagaaaatag | aggcacttta | gagctgagct | aatcccacag | ccacctcaac | 11940 |
| acacaaacgg | ggaatctgag | acccgcattg | gcaccgtgcc | tgaggttcta | aagcccaggg | 12000 |
| cttctgactc | gcctcttggt | cttcttcagt | actgtgggtg | ggggtggggt | ggggggtgac | 12060 |
| attagctgat | gagaaagatt | ttggtttttag | aaagatggag | ttaacataaa | cgaagggtga | 12120 |
| ctgggactgg | tctcctctgc | tgacttcatg | ggaagcacac | acacgcacac | acacacacac | 12180 |
| acacacacac | acacacacac | atacacacac | ctgtccaaga | tcagaaaaaa | tcctctcacat | 12240 |
| ccctgtagca | tgatcctgat | tgtaaaaatg | gagccctaata | cagaagggca | gaagcatgat | 12300 |
| tgccctctcaa | gagatttgga | cgccactttt | tcatagttgg | ttttagctgc | tttgcgatat | 12360 |
| atactgaaat | aaatagaaaa | gggaaagaat | tgtaacctgg | attgacagac | aacaagccct | 12420 |
| gacagacaaa | aagcagataa | gaaataaaat | aaggaagata | acccataatg | taaaataaaa | 12480 |
| atagcacatt | gttgcatgca | ttgataccct | tttttttttt | tctttgagat | cttgctctgt | 12540 |
| ctttcaggcc | gaagtacagt | gtctcaatca | tagctcactg | cagcctccag | cttctggggt | 12600 |
| caagcaatct | tcccatctca | gccacccaag | tagctggggc | tgagggcacg | aactatgggt | 12660 |
| cccagctgat | aattttttaa | aatagggaca | ttagtgcatt | tagcaaattt | gagtgtctgc | 12720 |
| tgtgtatcaa | gcactgttct | gggcactggg | acagcacagg | gagcaaataa | acaaaagccc | 12780 |
| ctgcgctcaa | ggtgctcgta | ttctagaggg | agatgctgag | ttcacctccc | attaaaatgc | 12840 |
| cattctcaag | atccagtcct | tccaccacc | ccagccccc | gggttttggt | ggaaatttaa | 12900 |
| ctaagttgga | agattgataa | tatctccatt | cacatttgga | tatgatttta | atgaaggttg | 12960 |
| ctttttgggt | tttagggaga | agaaaatggc | ttccagata | gcactggaga | tcctcttcca | 13020 |
| ggtaaatgat | tgattctaaa | gctatctggg | ctaatagcta | gtgtggctga | ataaaagata | 13080 |
| atlttagggc | agggtcggtg | actcatgcct | gtaattccag | cactttggga | ggccaagggt | 13140 |
| ggcggatcac | ctgaggctag | gagttcaaga | ccagcctggc | caacatggta | aaaccccgtc | 13200 |
| tctacaaaaa | atacaaaaat | tagctgggtg | tggtgggcgc | ctgtaatccc | agctactcgg | 13260 |
| aggctgaggc | aggagaatcg | cttgaacccg | ggaggcggag | gttgacagtga | gccaaagatca | 13320 |
| caccactgca | ctccagcctg | gacaacagag | cgaaactcca | tctcaaaaaa | ttaaattaaa | 13380 |
| taaaataaat | aatttgagac | tatgtttatc | attaacttta | aaatctgtac | tcgagaatag | 13440 |
| agcaactttc | tacctgcggt | gcactgcagg | gaaagccgta | tcttacaaga | cttcacaaaa | 13500 |
| gccttcaaag | agtattttct | ctgcactaac | cttcctttgc | atgtgagggg | cacggcaggg | 13560 |
| ttctgaatgg | ggcaggttta | ggatcaggcc | agtcgggact | gagtggtatc | ttcttccctc | 13620 |
| tgagttctaa | gagccatagc | attgggtggag | aacatgctgt | ttgttgcttg | gtggaaggga | 13680 |
| ccagaagcca | gctgggtcat | ctctctgttt | gtgccttggc | cacttaggta | gccaaaggag | 13740 |
| ccctcctgac | attaggtcag | gtgttagtcc | ctctcctttt | ctgcttttag | tgtgttttaag | 13800 |
| caaataaaca | ttaaagttca | tttctccccg | ctcccccttt | ttaatcataa | gacagacatg | 13860 |
| tttgcaatgt | ttaaattttct | cattaatcag | aagggatagg | gagtgaggga | gtaagcatta | 13920 |
| aaataagcta | gcaaatggcc | agggtgtggtg | gtcacacct | gtaatcccag | gactttggga | 13980 |
| ggccaagggtg | ggcagatcac | ttgaggccag | gagttcaaga | ccagcatggc | caacatggca | 14040 |
| aaactccatc | tctactaaaa | atacaaaaat | tagccaggcg | tggtgatggg | cacctataat | 14100 |
| ctgagctact | cgggagggtg | aggcagagaa | ttgcttgaac | ccgggaggca | aagattgcag | 14160 |
| tgagctgaga | ctgcaccact | gcattccagc | ctgggtgaca | gagcaagact | ccatctcaaa | 14220 |
| aaaatgctag | caaaataata | ataataataa | taataaaaaca | tacctacca | acatttttcta | 14280 |
| catcttgtaa | agcatacatt | gactgactga | agtcaccaga | gttttggttc | tttctttctt | 14340 |
| aagcagggtg | gggaaccctg | agagccctca | ggggcagcta | tcacagccc | aggtaaccaa | 14400 |
| gctgaaaaac | cagaaggtgc | agtgcgtact | caactttttc | cccttagaaa | cacgatatta | 14460 |
| gaaaatacac | caataccaac | atgtgagcaa | cagttctctc | tggaaggtgc | agttctgggt | 14520 |
| gatttttttt | tcattccata | gatttttttt | ttcttgagac | ggagtttcgc | actcttggtg | 14580 |
| cctaggctgg | agtgcaatgg | tgcgccacca | cgcccggtca | atttttgtat | ttttagtaga | 14640 |
| gacgggggtt | caccatgttg | gccaggctgg | tctcgaactc | ctgacctcag | gtgatccacc | 14700 |
| tgcttcggcc | tcctaaagtg | ctgggatgac | agggtgtctca | ctatgttgcc | taagcttttc | 14760 |
| tcgaaccctt | gagctcaagc | ctcctcccac | ctcagccatc | caaagtgtcg | ggattacagg | 14820 |
| catgagccac | cacgcctggt | gagtttttat | tttctttcca | ctatccntat | atttctaaaa | 14880 |
| tttctaacat | gagctggtat | cagaactgcc | cctccgcatt | taatctgtgt | atacaaatgt | 14940 |
| atatataaca | aatgatcaca | tgttggtaan | gtataccttg | ctgcatgggtg | aaataaccaa | 15000 |

| | | | | | | |
|-------------|-------------|-------------|-------------|-------------|-------------|-------|
| ggaaacttct | aaaaggttaa | ctgtggttgg | cctgggtaat | gggagcatta | atTTTTTcca | 15060 |
| tatgctcatc | tgaattttca | gatttgctat | gacaagcaca | tatttatttt | ctaattttta | 15120 |
| aaatctatat | ttaaactcct | taaagactaa | caccctacac | actaatgtgg | caggttagct | 15180 |
| aaaataaaaa | taaatacaga | aatttgttta | gaaatatttg | taaacccttc | aaggactcct | 15240 |
| ctgaatgata | gtcattatta | attagcaggt | taattttaat | caggcttctg | gtcatcttca | 15300 |
| aacatttttt | acttggtgca | aaatgaacca | ccagagtgtg | ggtttttttg | ttattttttt | 15360 |
| tgtttttttg | agacagagtt | tcactcttgt | tgcccaggct | ggagtgcaat | ggcgagatct | 15420 |
| cggtcactg | caacctctgc | ctcctgggtt | caagcagctc | tcctgcctca | gcctcctcct | 15480 |
| gagtagctgg | gattacaggc | gcccaccacc | acaccagct | aatttttgta | tttttagtag | 15540 |
| agatgggttt | tgccatgttg | gccagggttg | tcttgaactc | ctcacctcag | acgatccacc | 15600 |
| cacctcagcc | tcccaaagtg | ctgggactac | agatgcacac | caccacaccc | ggttaatttt | 15660 |
| tgtattttta | gtaaggacgg | gggttcccca | tggtggccag | gctggctctca | aactcctgac | 15720 |
| ctcaagtgat | tcacctgcct | tggcctccca | aagtgtctgg | attacaggcc | tcgcccaccg | 15780 |
| caccagccc | aacctgggtc | cttttgtatg | tgagagtttg | cttggttttt | tcacgtgctt | 15840 |
| tctctactcc | agttttatct | tatgacaaaa | ttgaggccca | acatgattta | cttgccctgga | 15900 |
| tcacaccaac | ctgtcagtta | cttcccagtg | ctgctgccaa | cttaatgtct | ccttaaaagg | 15960 |
| atgctttaga | gaaaacgaaa | tcagtgttgt | tttccccctt | ggttaagaga | tcaaacgccc | 16020 |
| acaaaaagcc | cttgggtcag | tttcttagta | gataaaaata | attcttcgtc | actttctgaa | 16080 |
| agcggctaac | atataacctt | tatgatgaat | aatgtggtgt | gtgtgtgtgt | gcgcgccccca | 16140 |
| aattccaatg | agttatcaaa | gccagaaact | tatattttaa | atatgtttat | ttcccaacca | 16200 |
| cactggaaac | cacacacaga | aaaaaaaaaa | agcatgatta | tacccctta | ataaccgtta | 16260 |
| ctgcagaagg | atgtgactct | ccttcaacac | ttgttggtat | tttacagcct | ccaaatctga | 16320 |
| ccatgtataa | ccacctggga | tagagttatt | ttatttcaga | accataatac | ttagctatct | 16380 |
| cggaagttgc | caatataaaa | tgtttactct | ctaattggtt | tgaactaact | caagacctgg | 16440 |
| ttatcccggg | gagcatcctt | acaaatgata | tgagagctaa | cagtcctctt | gcagcagtg | 16500 |
| agggaaacac | tcccggtgga | atcactctcc | aaaagccaga | atgtgcaaga | taaaagggca | 16560 |
| ccttccctgc | agggaggcac | attaagtcag | tctgtgatct | gctgccaca | tcctgactgg | 16620 |
| agcgtttct | acgcctaact | aatcatgacg | tttgtgaatt | gtgaagcttg | ttgcaattca | 16680 |
| caattaaactg | ttaattgacc | cataattttat | aaccgcag | ccatgaactt | acaagttaga | 16740 |
| tacagacact | accagacatt | cactattttt | ttttacaatt | gttttaaatg | acattaatga | 16800 |
| gcatgcttga | ttcctgaact | cttctttaca | gtataatttt | aaaatatattg | agtgggatac | 16860 |
| gatggagagg | agggaggtgg | gggaagaaat | gccccatgga | aaaccactc | atcaggttga | 16920 |
| gagtgtggag | aagccctgtg | tatctgagaa | ctcttaatca | tcacagaca | tggtatctct | 16980 |
| caaagagaag | tgggtgtaat | tccaaaatct | aattttggca | ggcgctcctg | actaaatact | 17040 |
| taatctggag | atgtcttcaa | ggcaggcgga | ggttttcagt | cctggctgca | cattagaagt | 17100 |
| cccaggggag | ctttaaaaaa | ttcccacgtc | ctccctgcat | cccagactaa | ttaatcgga | 17160 |
| tctccgaggg | tgggaccaca | catcagggtt | ttgtaaattt | ccctgggggt | ttgggtgggt | 17220 |
| tgggggtgga | ggcgtctatc | ctatggccaa | ggttgagaac | cactgctttt | taaaagactg | 17280 |
| tttgcttggt | tttgagatgg | ggtctcgtc | tgtcacccag | gctggagtgc | agtggcgcaa | 17340 |
| tctcagctca | ctgcaacctc | tgccctcctg | gctcaagcaa | ttctcctgaa | aaaggctggt | 17400 |
| ggttattaat | gcttccccac | agctattcta | ttcattgttg | catgcttctt | acgtgtgcta | 17460 |
| ggatgggagc | tttaaaggat | tacctcattt | aatcctcaca | accaccttgt | gagagaggtg | 17520 |
| tcattatccc | tgtttgagga | gtgagacagg | ggcttagcaa | gctcagtaac | ctgtccaagt | 17580 |
| cacacatctg | catgggggta | gctgctgcta | aagctcatgc | cgttaatctc | catggtacac | 17640 |
| ggtgtcctct | ccatagcaat | cttgcggtg | ccttgtaaac | acaaaaaaa | cttgcacag | 17700 |
| ctggtttgac | aattttctaga | taaagagctc | ttttcggtgt | gctaagaagc | ctaatttttc | 17760 |
| atgtgatttt | cttcttgaac | tgtgtcacac | tcctcattca | tttgatata | tcatcaaata | 17820 |
| cttattgagc | acctgtctgt | tgcttggtgt | gcagcagtga | caccagacat | ccaaagtcc | 17880 |
| tttctctta | gagcttattc | tatctgggag | agacagataa | taaacacaaa | atcagtaagt | 17940 |
| cattttatat | ggtggtaggt | gccttgagga | agatgagcca | ggttaatggg | attaagcctg | 18000 |
| gtagggggag | ggtgccactt | tagctcggaa | agggtagcga | gaccacaaaca | atgcaaaggga | 18060 |
| cccggcccg | ggagatctaa | gacaggagga | tgccaggggac | aggaagtgtg | tggggcacaag | 18120 |
| cccctgaggg | tggactgagc | tcagtgttct | aggacggggc | tgggcagtga | ggagcagcag | 18180 |
| aggaggtgag | ctgggagata | gcctggggac | tctttcttct | gcctccttca | aaaaataaaa | 18240 |
| ctagccaggt | gtggtggctc | acacctgtaa | tcccaacaat | ttgggaagct | gatgtaggtg | 18300 |

| | | | | | | |
|-------------|-------------|-------------|-------------|-------------|------------|-------|
| gattgcttga | gtccaggagt | tcgagaccag | cctgggcaac | atagtgagac | ccctcccccc | 18360 |
| atttctacca | aaaaatcaaa | aaatttagctg | ggcccgggtg | cgtgcgcctg | tggtcccagc | 18420 |
| tactcaggag | gctgaggtgg | gagcattgtt | tgaacccggg | agggtggaggc | tgacgtgagg | 18480 |
| cgtgattgtg | ccactgtact | ctagcctggg | tgacagagtg | agactctgtc | tctaaataaa | 18540 |
| taagtaaatc | tagaacctaa | catcttggag | tgacgtggca | ccaccatggc | tacttgcagc | 18600 |
| ctcaatctcc | tgagctaata | gagcctcccc | ttcagcctcc | tgagttagctg | ggactatagg | 18660 |
| cgtgcaccac | catacctgaa | taatcaaaac | ctaacatctt | taaagaacat | tggcataaga | 18720 |
| cttggcaaaa | atggcatctt | gtccctcatc | tcatattagtc | caagcgatac | aggaaatgct | 18780 |
| gccacctcca | ttttatagat | gaggagtctg | acgttcctag | aggttcaatg | ccctgaaacg | 18840 |
| tcaagccttg | aggaagttgg | agcactggga | ttcgaagagc | accatccaat | acagacccag | 18900 |
| aatcaggatg | atttgggatt | atgcttgtca | aggactcagg | gcagggtctac | catacattag | 18960 |
| gcacaagaat | tttgatagtg | ataattactg | tgttcattgt | cacttcatca | tgacagttac | 19020 |
| cgtgatgata | agaaacctgg | cccttcttca | cctgacaaag | gctttcttcg | tttgagccac | 19080 |
| tgctcaaacy | agactgacca | agaataaatc | ctcggggctt | tggcctttta | aataggaagt | 19140 |
| catcataaat | gacttgatgt | ggtgtgtttc | attcttgctt | tgaccagtg | gaaaatatac | 19200 |
| aggtaagca | tcaaaacatg | gcaaattggg | accccaatta | ttagagaatc | taagttaatt | 19260 |
| tttatgtata | attaattatt | caacaaccct | ctcctctcca | aaccaataat | taatccatct | 19320 |
| tttgatattt | aagaccaatt | ctgtagtatt | ttccatcaat | atctattttac | tgctagcaga | 19380 |
| tatcagctac | attctttctc | ctttaataga | agttccctct | ttaggtatta | agattcatta | 19440 |
| aacaacaata | acaaatctac | cttgccctccc | agggacaatg | cacagttctc | attcatttgt | 19500 |
| tcatttagca | gataattttt | gaatttccac | tgtacagcag | ccctgtgctt | gtggttggcc | 19560 |
| tgttatttga | gaagcatcaa | ataataatct | catttttttg | ctgggtgtga | tagctcacgc | 19620 |
| ctgtagtccc | agcactttgg | gaggctgagg | cgggtggatc | acttgaggat | gggcgttggg | 19680 |
| gaccagcctg | gctaacatgg | tgaaacctcg | tctctattaa | aaatacaaaa | attagccagg | 19740 |
| tgtggtggca | gacacctgta | atcccagcta | ctcgggaggg | tgaggcagga | gaatcgcttg | 19800 |
| aacctgggag | gcagaggttg | cagtgcgccc | agatcgcccc | attgcactcc | agcctgggca | 19860 |
| acaagagcga | gactccgtct | caaaaaacaa | aacaaaaaaa | gacaaaaaaa | aacccaacaa | 19920 |
| ataaaataaa | taatcccatt | tttctccatt | tttgagaaag | atttcttttg | tctgaagtct | 19980 |
| ttctctcccc | tctccgaggc | attacccagt | ttaacctttc | atgtataata | tatatgatag | 20040 |
| ttattttaaag | tatagcagga | caaaatgtat | ttgataggag | aaaaccttgt | ttgctctgtg | 20100 |
| ttaagtcctc | cagagagcta | attagagttt | gtgattctaa | aaggcaacta | tagattcact | 20160 |
| tatattagca | gttcatgtag | attccagtta | aggaaatggt | ttgtcacttg | tgttattgaa | 20220 |
| aacacacaca | gggcgagcac | tgtggcccat | gctggtaatc | ccagcgtttt | gggaggctga | 20280 |
| ggtgggcaga | tcacgggggtc | aggagtttga | gatcagcctg | gccaacatgg | tgaaaacccg | 20340 |
| tctctactat | aaatacaaaa | aattagctgg | cagttagtggc | aggcgcctct | aatctcagct | 20400 |
| actcgggagg | ctgaggtagg | agaatcgctt | gaaccagga | gtcggagggt | gcagtgcagc | 20460 |
| gagatcgcac | cattgcactc | cagcttgggc | aacaagggca | agactccgtc | tcaaaaaaaa | 20520 |
| agaaagaaaa | cacacacaca | aaaaaacttt | agtagatctt | tcggcatatt | atttttttaa | 20580 |
| ataaaactgat | aatggttgat | atgattgttc | aaagaaataa | gagcttttca | taaactcagt | 20640 |
| ttaaagaaac | tttacaggcc | gggcgcgggt | gctcatgccc | gtaatcctag | cactttggga | 20700 |
| ggccaaggcg | ggtggatcac | ctgaggtcaa | gagttcgaga | ccagcctggc | caacatggta | 20760 |
| aaagcctgtc | tctattaaaa | aatacaaaaa | ttagccaggt | gtgttggctg | gcgcctgtaa | 20820 |
| tctcagcaac | tcaggaggct | gaagcaggag | aatcgctgga | acctggtagg | cagagggttg | 20880 |
| agtgcagaaa | aatcgtgcca | ttgcactcca | gccccagctg | acaacagcga | gactccatct | 20940 |
| caaataaata | aataaataaa | taaataaata | aataaataaa | ggagctttac | agaaaccttc | 21000 |
| tgatgttttt | ttcttcttga | cgataacatt | gccaacactg | aatcttacia | agataagaca | 21060 |
| agaaagggac | cttcagacac | cattacatgt | aattctggac | ttagtgggtt | aaatccttat | 21120 |
| ttttctatga | cattaaaaaa | atgtatat | taggccaggc | acagggtctc | cacctgtaat | 21180 |
| cccagcactt | cgggaggccg | aggcaggtgg | attgcttcag | cccaggagtt | caagagcagc | 21240 |
| ctggggaaca | tagtgagacc | cctgtcccta | cagatttttt | ttttttgttt | gagatggagt | 21300 |
| tttgctcatg | ttgcctaggc | tggagtgagc | tggcacgata | tcggttcact | gcaacctctg | 21360 |
| cctcctgggt | tcaagcaatt | ctcctgcctc | agcctcccaa | gtagctggga | ttacaggcat | 21420 |
| gtgccaccac | acccggctaa | ttttgtattt | ttggcagaga | ctgggtttct | ccatgttggg | 21480 |
| caggctggtc | ttgaactccc | aacctcaggt | gatctgcctc | cctcagcctc | ccaaagtact | 21540 |
| gggattacag | gcgtgagcca | ccttgcccag | cctacaaaaa | gtttttaaaa | attaaaaaat | 21600 |

| | | | | | | |
|-------------|------------|-------------|------------|-------------|-------------|-------|
| tagttgggca | tggaggtgca | tgccagctac | tggggaggct | gaggcaggag | gattgcttga | 21660 |
| gccccatgaag | tggaggctgc | agtgagccat | aattgcagca | ctgcactcca | gcctggggcca | 21720 |
| tagagcaaga | ccctgtctca | aaaatatata | tagtatccaa | ataaacacaa | taattacaga | 21780 |
| aaattgaaaa | gtgcccataa | gcaaaaaaaaa | aaaaaagaaa | aaattaatca | cctgcgttct | 21840 |
| catcaccag | aattaacat | tgttaatat | tttgttatag | atccttccaa | acttttctcc | 21900 |
| atgcttgtga | ttgtatttat | tatacatgat | ttacagggat | ataaacgact | gtattattag | 21960 |
| tcattagaag | aactggatta | tggccgggca | cggtggctca | cacctgtaat | ctcagtactc | 22020 |
| tgggaggctg | aagtgagcag | atcatgaggt | caggaaatcg | agaccatcct | ggctaacaga | 22080 |
| gtgaaacccc | gtctctacta | aaaatacaaa | aaattacctg | ggcgtgggtg | caggcgcctg | 22140 |
| tagtcccagc | tactcgggag | gctcaggcag | gagcagagat | acctatctgt | tctcaggatt | 22200 |
| ttaaggtgtt | gcgcggaaat | aagaaaaccg | tacagtgttt | ctcactacaa | agcagggtca | 22260 |
| ggagatgcaa | acaaactgat | gtgggggttc | caagtgaggt | ggaattccag | acagggggccg | 22320 |
| ggaagacttc | gtggaaagg | agaatctgag | gtgggttttc | taggatgggt | aaagttcatt | 22380 |
| agaggaagag | aagtgcacaa | gaggaagttc | ggtgagaggt | agaggaagg | cgttctgatc | 22440 |
| atgaaggaaa | cactagaaaa | ggtatggaga | tagaaaaaga | taaggcctga | ttttttaacc | 22500 |
| taccacttaa | aaaaaatcct | tgaaaagaga | tttttaaaac | gaataacttg | tgctgacaaa | 22560 |
| ggtgaaatga | ccgggcgcgg | tggctcacac | ctgtaatctc | agcacattgg | gaggctgagg | 22620 |
| cgggcagatc | acttgagctc | aggagtttga | gaccagcgtg | gccaacatgg | caaaactcca | 22680 |
| tctctactaa | aaatataaaa | attagacggg | tgtgatgggt | ggtgcctgta | gtcccaacta | 22740 |
| ctcaggaggc | tgaggcagga | gaattgcttg | aaccgcagag | gcggagggtg | ctgtgagctg | 22800 |
| agattgtgcc | actgcactcc | agcctggata | gcaggatgag | actgtctcaa | aaaaagaaag | 22860 |
| aaaaggaaa | aaaaaaaaat | ccgtactgta | aactggtaaa | ggctttcttt | ctggagagca | 22920 |
| atttggggca | catgcaccag | tagccttaga | aggctcatgc | ttttgacct | attatcctat | 22980 |
| tagtggtgag | atgattaaag | atgtggcccc | aatttatgtg | aaaggatatg | atcacactct | 23040 |
| cactcataat | caggagaggt | ggggaaaacc | ctagctgtta | atagtttatc | caaaatccat | 23100 |
| atatatatgt | gtgtgtgtgt | gtgtgtgtgt | gtgtgtatgg | atttatatat | atatataaat | 23160 |
| ggatatatat | atatatctgg | atggatatat | aaatatgata | tatatatgtg | tgtgtgtgta | 23220 |
| tatatatatg | tgtatatatg | tatatatata | tgatggaata | ctatttagcc | ataaaaagga | 23280 |
| atgaattaat | ggcattcgca | gtaacctgga | tggacttggg | gaccattatt | attttatttt | 23340 |
| atttatattat | ttttgagacg | gagtctcgct | ctgtcaccca | ggctggagtg | cagtggctcg | 23400 |
| agctcagctc | actgcaagct | ccacctcccg | agttgacgcc | attctcctgc | ctcagcctcc | 23460 |
| tgagtagctg | ggactgcagg | cgcgcgccat | cacgcccaga | taactttttg | tatttttagt | 23520 |
| agagactggg | tttcaccgtg | ttagccggga | tggctcccat | ctgctgacct | catgatccac | 23580 |
| ccgcctcggc | ctcccaaagt | gctgggatta | caggcgtgag | ccaccgcgcc | cagcgagact | 23640 |
| gttattctaa | gtgaagtaac | tcaggaatgg | aaaaccaaac | atcgtatgtt | ctcactcata | 23700 |
| agtgggagtt | atgctatgag | gacgcaaagg | cataagaatg | atacgataga | ctttggggac | 23760 |
| tcagggaaaa | ggtgggaagg | gggtgaagga | taaaagatac | aaattgggtg | cagtgtatac | 23820 |
| tgctcgggtg | atgggtgcac | caaaatctca | taaatcacca | ctaatagaact | tactcatgta | 23880 |
| accaaatacc | acctgttctt | caataaacca | tggaaattaa | aaaagaaaaa | agaaaaagta | 23940 |
| ccctggaaaa | aaaatttctc | cctggccagt | cacggtggct | catacctgta | atcccagcaa | 24000 |
| ttcgagaggc | ttaggcagga | ggatcacttg | agcccagtag | ttcaaaaacca | gccagtgcaa | 24060 |
| catagtggga | ccctgtctca | aataaaatct | aaaaattagc | cagggtgtgt | ggtgcatgtc | 24120 |
| tgtggtccca | gctactcagg | aggctgaggt | gagagtattg | cttgagccta | ggaggttaag | 24180 |
| gcggcagtg | gccgtgattg | tgccactgcc | atccaacctg | ggcaacaaag | caagaccctg | 24240 |
| tctcaaaaaa | aaagaaaaaa | aaaacctctc | tattcgcctt | ttaagaatac | ctgggcttct | 24300 |
| ctgtgtacac | ttaagcttca | ttggagtctt | tagacttttt | ttttgctgta | tctgtccagt | 24360 |
| taccaagtcc | cagcttctac | tccatgctcc | ccatgctctc | ttcctatttt | attttccatg | 24420 |
| actgcctcgg | tataacttgt | gctcaaccaa | actggactac | tcaattccct | gcattttctt | 24480 |
| ttttaaagtt | taatcaaaaa | aaaaaagaaa | actggctggg | cacagtgggc | ttctgcccac | 24540 |
| aatctcggtg | ctttgggaaa | ctgaggcagg | aggattgctt | aaggccaaga | gttcaagacc | 24600 |
| agcctgggta | acatagcaag | acctccatct | ccacaaaaaa | atttaaaaat | tgactgagtg | 24660 |
| tgatgggtg | cacctagtcc | cagctgcttg | ggaggctgag | gcaggagaat | tgcttgagcc | 24720 |
| caggagttcc | aggttatgat | gagctatgac | tgtgccaccg | cactccagcc | agggtaacag | 24780 |
| agtgggactg | tctcaaaaaa | caaaacaaaa | tccctaatat | aatctcagtg | tgccctttta | 24840 |
| gtatgccata | tatatatata | tatatatata | tatatatata | tatatatata | acattttctt | 24900 |

| | | | | | | |
|-------------|-------------|-------------|------------|-------------|-------------|-------|
| tatccactca | ttgattttca | tgtagttcta | atcgtagaat | tcatacatte | tttctatctt | 24960 |
| ccatctttca | cataacatca | caaacatttt | ctaggttgcc | atattgtctt | catagttact | 25020 |
| taaataatat | tccatcaagt | agcacaatca | tttatttcac | tagtcctcta | actgtagaca | 25080 |
| ttttggttgt | ttttgaaact | taataatgta | aataacaccg | tgataacaat | gtttatgtaa | 25140 |
| attcatattt | tggattatct | ccttaggggtg | gattcccaga | agtcacatta | gtaggtcaaa | 25200 |
| gagtatgagc | ctattttcaa | ggctcttggt | ttattacctt | ttaatttcca | cttgccctcaa | 25260 |
| tattgctggt | ttgctccctt | atgatcacca | gagttactcc | gtcgggtccaa | attctttacc | 25320 |
| ttccgaaact | gggaaggcca | tgactcaatg | ttatatatat | agtaaaggct | actataacct | 25380 |
| tccccagaat | tttccaagcc | agtggctctct | aaagtgcact | ttggctgtta | aaatctgaat | 25440 |
| tcagaggggt | catgagactc | agtgttggtg | tagaatttaa | gctccttaat | ttgccacggt | 25500 |
| gttttagacac | cacttaatac | tttattgcaa | atgacttgct | aacgcctctc | acctacaaac | 25560 |
| ttcatcctcc | tacaaatata | cctcctgcta | atcaaagtag | gctacagttg | agtctttaag | 25620 |
| tttcagtaga | aagatggccc | ttcctctggg | gtaggcgcat | gctcttcatg | ctgaagctca | 25680 |
| gctgaaaagc | ctcctgctga | gttttctgcc | tctttccctc | ccactgcaca | caccccaggg | 25740 |
| tggtggcgcc | acttcaaagg | gagcctgtgg | atgaagaaaa | cacaggtaaa | ggcagagggc | 25800 |
| tcataagggg | gccataaatt | taaaaagtta | agattcctgg | cactatcaac | tctcacttgt | 25860 |
| tttcaaatat | gcatatggag | tggatattcc | agttttcatg | tctgtgttgt | tgttttttaa | 25920 |
| aaaagacctt | tcaaagaact | gtgcattttt | tacaggctga | caggctgtgt | ttggtgttaa | 25980 |
| actgtcaggg | ctgactgggtc | acttggaaaag | ggcaagggct | gaggtgcatg | caagtgtcgg | 26040 |
| ctgggtactc | acagacacag | cagccccctt | taccccgag | agagttctgt | ttgctggagc | 26100 |
| ccttattctg | gccagcagtg | tcacaaatgc | acactgtaag | acatagacag | tcttggaaaag | 26160 |
| aaagggaaa | tggtttttaa | aattcttact | ccttctagca | aagcaattca | tctttggcta | 26220 |
| taaagaataa | cacagccagg | tgcggtggct | catgcttgta | atcccagcac | tttgggaggt | 26280 |
| caaggtgggc | agatcacttg | agtctaggag | ttcaagacca | gcctgggaaa | catggtgaaa | 26340 |
| ccccacctct | acaaaaaaa | aaaaaaagaa | agaaagaaaa | gattagccag | gtttggtggt | 26400 |
| acgtgcctgt | agtcccagg | actcggaag | ctgaggtggg | aggatcgctt | gagcctggag | 26460 |
| ggcggaggtt | gcagtgaacc | gagatcatgc | cactgcactc | cagcctgggc | aacagagtga | 26520 |
| cacctgtgat | caaaaaaaa | aaaaaaaaag | aacagtaaca | cattattaga | aatgagcatt | 26580 |
| ctgaggccag | gcacgggtggc | tcatgcctat | aatcgagca | ctttgggagg | ccgaggcggg | 26640 |
| tggatcacaa | ggtcaggaga | tcgagaccat | cctggctaac | acggtgaaac | cccgtcttta | 26700 |
| ctaaaaacac | aaaaaattag | ccgggtgcag | tgccgggtgc | ctatagtccc | agctactcag | 26760 |
| gaggctgagg | caggagaatg | gcgtgaaccc | ctgggaggcg | gagcttgacg | tgagccgaga | 26820 |
| tagtgccact | gcactccagc | ctgggcgaaa | gagcgagact | ccatctcaaa | aaaaaaaaaa | 26880 |
| aaaagaaaga | aacgagcatt | ctgaaatagt | cttccatatt | atgcttttga | caattcagca | 26940 |
| ggaaaataaa | ggatgtaaga | aatgaatgca | tatgttaggc | ctcttggtga | cctgtggact | 27000 |
| aaattgtttc | tccctgcaga | gatcagcaag | gacaactcct | gcaaagaaaa | ctgtacttgt | 27060 |
| tctcctgct | tgctccgggc | ccccaccata | agtgaactgc | tcaatgatca | ggacttacta | 27120 |
| gacgtgatca | ggataaagct | ggatccgtgt | cacccaacgg | tgaaaaactg | gaggaatttt | 27180 |
| gcaagcaaat | gggggatgtc | ctatgacgaa | ttgtgcttcc | tggagcagag | gccacagagc | 27240 |
| cccaccttgg | agttcttgct | ccggaacagt | cagaggacgg | tgggccagct | gatggagctc | 27300 |
| tgaggctct | accacgtggc | cgacgtggag | aaggttctgc | gcagggtggg | ggacgaggag | 27360 |
| tggcccaagc | gggagcgtgg | agacccctcc | aggcacttct | agagctcttc | ttcttcttcc | 27420 |
| attggcctct | ccggatgttg | aaacaaccac | aggtcaagaa | ggaatgtgaa | tctgttgttt | 27480 |
| tataagagtt | taggacaagg | acgtggaaca | gtggacactg | gttttcccca | aagctggcag | 27540 |
| ttttgtggag | gggtagcttg | tttcgggtgg | ggatctctgt | ttatttttgc | acatctgtta | 27600 |
| taatttaata | ttcaaactct | gaattaaaga | aacatatttt | ctagtatcct | ctaagggccca | 27660 |
| aagtcctaca | atcggaatgg | attcatgcca | cggtgaagat | aaaattatcc | tctctctgaa | 27720 |
| atacggtaaa | gatttaataa | ggtcctgaga | ctgttgatag | ccccagacat | accacagaca | 27780 |
| ttatatgtaa | catctctcct | gatcagtgcc | attcccacgg | tttcaaagaa | aacagctaca | 27840 |
| aggaatgctt | acctgagtg | ctgcagcacc | ctccacttct | ctcctaggca | atgagaccca | 27900 |
| gtggctagaa | attcaccatg | tctattctca | agatccatgc | cagggagctc | tttgactctc | 27960 |
| gtgggaatcc | cactgttgag | gttgatctct | tcacctcaga | aggtctcttc | agagctgctg | 28020 |
| tgcccagtg | tgcttcaact | ggtatctatg | aggtcctaga | gctccaggac | aatgataaga | 28080 |
| ctcgctatat | ggggaagggt | gtctcaaagc | ctgttgagcc | catcaataaa | actattgcac | 28140 |
| ctgtcctggt | tagcaagaaa | ctgaacgtca | cagaacaaga | gaagattgac | aaacttatga | 28200 |

| | | | | | | |
|-------------|-------------|------------|------------|-------------|-------------|-------|
| tagagatgga | tggaaacagaa | aataaatcta | aatttggtgc | aaatgccatt | ctgggagtgt | 28260 |
| ccctcgctgc | ctgcaaagct | agtgtgttg | agaaggggt | tccctgtac | caccacatcg | 28320 |
| ccgacttgtc | tggcaactcc | aaagtcatt | tgccagtc | ggtgttcaat | gtcatcaatg | 28380 |
| gcagttctca | tgctgtcacc | aagctggcca | tgaggaggt | catggctctc | ccagtcggtg | 28440 |
| cagcaaactt | cagggaaagcc | atgccattg | gagcggaggt | ttaccacagc | ctgaagaatg | 28500 |
| tcataagga | gaaatatggg | aaagatgcca | ccggtgtggg | ggatggaggc | gcgtttgctc | 28560 |
| ccaacatcct | ggagaataaa | gaaggcctgg | agctgtgaa | gactgcgatt | gggaaagctg | 28620 |
| gctacactga | taaggtgatc | gtcagcatgg | acgtagaggc | ctccgagttc | ttcaggtctg | 28680 |
| gaaagtatga | cctggaattc | aagtttctcg | acgacccac | caggtacatc | tcacctgact | 28740 |
| gtctggctga | cctgtacaag | tccttcatca | aaaactaccc | agtgggtgtc | actgaagatc | 28800 |
| cctttgacca | ggatgactgg | ggagcttggc | agaagttcac | ggccagtgca | ggaatccagg | 28860 |
| tagtggagga | tgatctcaga | gtgaccaacc | caaagaggac | agcctcggcc | gtgaatgaga | 28920 |
| agaagtgcaa | ctgcctcctg | ctcaaagtga | accagattcg | ctctgtgact | gagtccttcc | 28980 |
| aggcgtgcaa | gctggccag | gccaatggtt | ggtgtgtcat | ggtgcctcat | cattctgggg | 29040 |
| agactgaaaa | taccttcac | actgacctgg | tggtggggct | gtgacctggg | cagctcaaga | 29100 |
| ctggtgcccc | ttgctgatct | gagcgttgg | ccaagtacaa | ccagctcctc | agaattgaag | 29160 |
| aggagctggg | cagcaaggct | aagtttgccg | gcaggaactt | cagnaacccc | ccagccaagt | 29220 |
| aagctgtggg | caggcaagcc | cttcagtcac | ctggtggcta | attagacccc | tcccttgtg | 29280 |
| tcaactccgg | cagctcaaga | cccccgagca | acattttag | gggcccgtgc | tagttagcta | 29340 |
| cccttgcccc | ccgcccgtga | gttcgcacct | cttcttaga | acttctacag | aagcaggttg | 29400 |
| cagtgaagcc | agattgcgcc | actgcacacc | agtttgaga | cagagtgaga | gtccgtccca | 29460 |
| gaaaaaaaaa | aaaaaaaaaa | gaacttntac | agaagccaag | ctccctggag | ccctgttggc | 29520 |
| agctctagcc | ttgcagtcac | gtaattggcc | caaatcaccc | gagccacgtg | acctccagt | 29580 |
| gtcatctccg | gggtggccac | aggcaagatc | cccagtgatt | ttgtgctcaa | aataaaaaagc | 29640 |
| ctcattgacc | catgagaaaa | aagaaaacag | caatgagaag | tgaccctgtc | ttgttggttt | 29700 |
| attacttttt | ttgttataaa | gtactttggt | gaattaacag | gatgctagta | ttacatggtg | 29760 |
| atactcttca | gaacacctgc | cccatctttt | ttatgcaagt | atgtttacaa | tcagtggact | 29820 |
| atcagtaatg | tcattttgctc | aaatattttt | taaagacct | cagaaactga | tggttatttg | 29880 |
| gaaaacagtc | aggaagtagt | gaggtaatca | aggccatggg | aatagtgttt | gacaaagaga | 29940 |
| gtactccaaa | tcccttttgg | ttaccagga | ctttaaaaaa | gagagtactc | catcacacct | 30000 |
| gtaatcccag | cactttggga | ggccgaggcg | ggtggatcac | gaggtcagga | gatcgagacc | 30060 |
| atcatagcta | acatggtgaa | accccgtctc | tactaaaaat | acaaaacatt | agccgggtgt | 30120 |
| ggtggcgggc | gcctgtagtc | ccatctactc | aggaggctga | ggcaggagga | tggcttgaa | 30180 |
| ccaggaggcg | gacttgagct | gagccgagat | agcaccactg | cactccagcc | tgggcgacag | 30240 |
| agcaagactg | tgtctcaaaa | aaaaaaaaaa | aagagtgtct | caaattctct | ttggttacct | 30300 |
| gggactttta | aaaatttaat | gtgatagtta | ggccgggtgt | ggttctcacg | cctgtaatcc | 30360 |
| tagcactttt | ggaagctgag | gcgggtggat | catttgaggt | caggagttag | agaccagcct | 30420 |
| ggccaacatg | gcgaaacccc | gtctctacta | aaaatacaaa | aattagccag | gcgtggtggt | 30480 |
| gggcgcctgt | aatcccagct | cctcgggaaa | ttgaggcact | agaattgctt | gaaccagga | 30540 |
| ggtggagggt | gcagtgcgcc | gagattgcgc | cactgcactc | cagcctaggc | aacagagcga | 30600 |
| ggttccattc | caaaaaaaaa | aattgtaata | ataataataa | caatgtaata | tttacttttt | 30660 |
| catcctttat | ataaggctga | gtgcttcacc | cctgagatga | agctcagtta | agaaataaat | 30720 |
| gaaaatcccc | taacctattg | gtgaaaggta | accaccccc | gctcctacta | gcccacttta | 30780 |
| aaacaggacc | ccatcacact | acacagcagt | ttagccaaga | aaaggggggc | tttatgtgga | 30840 |
| cactgggagg | gaagggatcc | cttcaaattc | aaacttttaa | ggatttttaa | caaataaaac | 30900 |
| atttggttca | agaatagct | gatgttttta | tttgatgatt | ttggagaaag | gaaagtgtgg | 30960 |
| ggcataatgg | ggtttgttat | tggaaagatc | agattttcta | ggttaatttg | gtggagaaag | 31020 |
| acaaaaggca | aagctttgac | tgacaattcc | atgaaagtgc | tatttggttt | tggttatggg | 31080 |
| cttagaaaat | taagacactt | agttcaattt | ggaaggatcc | tgtataagtc | cctgattaaa | 31140 |
| ataagcaaaa | atgatgaata | acactgattc | agtgcaccg | aaagattagg | attaactcaa | 31200 |
| aagaaagtta | ttttctaaac | caccgtgatt | ttttccactg | acaattacag | cggttttcat | 31260 |
| taggttgctg | acacatgaag | tcagcctcac | catcagttgc | aaactctaaa | ctagcaaaaat | 31320 |
| ctattacaga | gacatactta | tcacttctga | tttagtgcta | atctcaccca | gtcatcttcc | 31380 |
| tcttgctcaga | tttatgagat | aaatgtcaga | tttatcacca | gatataattga | aagtaacagc | 31440 |
| cagtaataaa | atgtgagatt | ttaaaaaata | gattcttttg | caaattgggtg | ttcagtgagg | 31500 |

| | | | | | | |
|-------------|-------------|-------------|-------------|-------------|-------------|-------|
| caattatttaa | acatttttgt | cagccagggt | ccaggcactg | tacagaagct | gttaggagtt | 31560 |
| ctcaccatct | acgaatttga | tttgatgtat | tgtattctca | ttaagctatg | tgtgacacat | 31620 |
| tgtcatttat | tagcccagaa | tttaaaaagc | tgtggttgtt | tagtggttgt | ggtagcagac | 31680 |
| cccagcagtc | tgatggctctg | cactccttcc | atcctgcccac | cccctgggga | tgcaaagact | 31740 |
| ggatctcagg | gtgacaatct | tcttgccgac | gactgcctgg | ccaagtgcct | ccagaaagcc | 31800 |
| ccttccttcc | cccatttcca | cccaggccca | cttgtcacct | cagcctaaca | ccagcctgca | 31860 |
| cagtctacgg | ccaccatcca | ggcagtgagg | gagggaaagg | ggaggagggt | ggaagggaaa | 31920 |
| acccctttct | atacctctcc | tcagcctgct | ctttcctcct | cccacctctg | agcctccgcc | 31980 |
| tccccagac | agagacagaa | aagatggaag | aacagggtgg | acctccaccc | ccaccccaag | 32040 |
| ccttcattccc | ggtggagggg | gatgggaaga | tttctctcat | ttcaagagac | tcctccacct | 32100 |
| cagactgaca | aaaggcagag | gcctggcaag | aagaaagggc | accctgggga | agaagggcat | 32160 |
| tgaaatagca | cctgccgggc | cgggcacggg | ggctcacgcc | tgtaatccca | acactttggg | 32220 |
| aggccgaggg | gcgtggatca | cggggtcagg | agttcaagac | cagcctggcc | aagatggtga | 32280 |
| aaccccgctc | ctactaaaaa | tacaaaaagt | agccaggcgt | ggtagcgggt | gcctgtagtc | 32340 |
| ccagctactc | cggaggctga | gacaggggaa | tgcttgaact | gggaagggtg | aggttgagtc | 32400 |
| gagccaagat | cgtgccatgc | actccagcct | gggcgacaga | gtgagactcc | atctcaaaaa | 32460 |
| acaaaaacag | aaatagcacc | tgccccacc | ccctgcccgc | cctccttccc | gcccccgctc | 32520 |
| tttcttagac | ttcactcaag | tcctctgctc | agaggaagcc | ctgctctact | gaaagccaca | 32580 |
| aggccattct | cgggtggcctg | ggacagcagc | ccaagacgtg | ggcttctaac | tgccctcgaa | 32640 |
| ggggccacag | cagcaaacat | aaataaaaaat | agtaaaatgt | tcttaaatta | taaatttaaa | 32700 |
| atttggaaaa | tttagtgagc | acagcttcta | gggggcatgt | ttccaaaatt | ccaaccacaa | 32760 |
| aagtgcagtc | tcaaaactga | ctgtaaacctg | aacataccat | ctcatctcag | acacagctat | 32820 |
| tggtcacgag | gttcagtgga | actttcctcc | cttgagatgg | acccaaaaacg | tcaagcaaga | 32880 |
| tgacatttgc | tgatttgcag | gcttcaggca | gataagatac | gggcagagtt | gagtggtgag | 32940 |
| ctttaccctt | aaatttcagga | atagcaggaa | cagcaggaaa | aacgtaggac | cacagcgtac | 33000 |
| gtcccacttg | tctttcattt | tgatatcatt | atttccagag | tcctgattgc | tagtcatgtc | 33060 |
| taacactgga | tttattatca | tctcattgct | agcatggcta | ggaaagcttt | gaacatcctt | 33120 |
| atcattctat | tttaattcct | attataattg | catggggaag | ttccagggtg | gaaaaatttc | 33180 |
| cttttctttc | tttttttttt | tttaatagga | gagttggctg | ggcacgggtg | ctcacgcctg | 33240 |
| tgatcccaac | actttgggag | gccaaggcgg | gtggatcacc | tgagggtcagg | agttcgagac | 33300 |
| caacctggcc | aacatagtga | aaacctatct | ctactaaaaa | tacaaagtta | gctgggtatg | 33360 |
| gtggtgcaca | cctatagtcc | cagctactgg | ggaggctgag | acaggagaat | cacttgaata | 33420 |
| cgggaggcag | cagtgcagca | agatcatgcc | actgcactcc | aacctgggag | agacagagtg | 33480 |
| ccatctcaaa | aaaaacaaac | aaaagagttg | atataaaattt | gctgttataa | tttgactgta | 33540 |
| ctgtttcttg | cacatgttga | catctgtaat | gactggagtt | tatgaaaatt | tttgatgagt | 33600 |
| aggagcatac | cattaacaga | gagaaattta | atcaaaagat | ttttaaaagt | ccttcagagt | 33660 |
| ccagactttg | actaagtgtg | gtatgattta | tatctatggt | gcatacaaaa | atatcaaaac | 33720 |
| gtaattccca | actgaaatac | aagtatcaat | caattgtgta | acaatgcaaa | atcatttaat | 33780 |
| ttaaagttaa | tttatagcaa | atgagtactg | taatagcata | agcatgccga | tactttacaa | 33840 |
| aggaggaagt | ggaaaggtag | gatattataa | ctaattgtac | aaatcattgt | taaaatttaa | 33900 |
| gtttatgaat | acttttactt | ctgtccgtag | ggatccatgt | taaattgggt | atattataaa | 33960 |
| cttaactgct | aatgatgagg | tccttttctg | attagaaatc | tattttttat | ttttctttat | 34020 |
| tattttttga | ggcagggtct | tgctctgttg | cccaggctgg | agtgagtggt | tgaaattata | 34080 |
| gctcactgca | gcctcaacct | cctgggctca | aggaatcctc | ctgcctcagc | ctcccaagta | 34140 |
| atggaaactg | cagtcgtata | caagcacacc | cagcaatttt | tttttttttt | tttggttaaga | 34200 |
| tggggtttag | ctatgctgtc | caagctgggc | tcaaaactct | ggcctcaagt | gatcctccca | 34260 |
| ccttancttc | caaagtgtctg | ggattacagg | cgggagccac | cattcccagc | ctagaatgaa | 34320 |
| atatcttttag | ctaaattaca | gggctggatg | tgggtggctca | tgctgtaat | cccagcactt | 34380 |
| tgggagactg | agggcgggag | ggtcacttga | gatcaggagt | ttgagaccac | cctgggcaac | 34440 |
| acagtgcagaa | ttctgtctct | attttaaaaa | gagaaaaatc | taggggtatat | tctcttaaac | 34500 |
| aaaactttca | tctataatgg | tagttgatga | ggctctatgt | aatatgcatt | tccttggttg | 34560 |
| caatagcaaa | ttactacaca | cacagaaagg | aaagccacac | tccccgacac | atctacacac | 34620 |
| aggaggactc | acacaggagg | gagactcaaa | gaaggcacgt | gacttttaca | ttgttagggc | 34680 |
| ttacatggtc | ctgggatttc | ccaccagtac | tcaaaagatc | aattgtatga | acaagtcacc | 34740 |
| tattttttacg | gcactaaata | attattattc | aacaacatgg | aaaatatgtg | gtagcagacc | 34800 |

| | | | | | | |
|-------------|-------------|-------------|------------|-------------|-------------|-------|
| tggattttcc | ttaagagtta | tttttatgtg | gtactgcccc | ctgctggaat | ataacatcta | 34860 |
| tacacatcct | ttctggctgg | gctgacatcc | taaaaccagc | ccaggaccag | ccttttatta | 34920 |
| atattaattc | ttggccaggc | gcggtggctc | gcctgtaatc | ccagtacttt | gggagtccag | 34980 |
| ggcgggcgga | tcacgaggtc | aggagttcaa | gaccagcctg | gccaacatgg | tgaaactccg | 35040 |
| gctctactaa | aaatacaaaa | cttagctggg | catagtggca | cattcctgta | atcccagtta | 35100 |
| ctcgagaggc | tgaggcagga | gaattgcctg | aaccgggacc | cgggagggtg | aggttgcggt | 35160 |
| gagccgaaat | cgtgccactg | cactccagcc | tgggctacag | agcgagactc | cgtctcaaaa | 35220 |
| ataaataaat | aaaaattaaa | attaaaaaat | aattcttggg | tgtatgctaa | aagccttgca | 35280 |
| agtagcccca | ctggaagata | ggaagagtgg | ggctgtttta | caaatagagc | catataagca | 35340 |
| gaacgaggcc | gccataattg | aatgaagggt | ccccgtcccg | tggatgtggt | catcgctact | 35400 |
| tcacctgttc | attcggatcc | aatgtgtgac | cagccagctc | caataacagt | tccatactct | 35460 |
| gggaattatt | tttaacactc | ggcaggatgc | tttcttctct | tagttttagg | cttagccctt | 35520 |
| tgtgcacttt | tggtctcttt | ccctttcaat | ttagcatcca | aggaagcggc | tgtgaccaa | 35580 |
| ggtagctgtc | atgttaaagg | acaaagttca | tagttacagc | aaatattgac | ccagagcact | 35640 |
| atccttgccc | cttctcttat | aatgtgcaat | gcaaaaatat | gttcttttaa | gtacaatatt | 35700 |
| aataagtaag | gtctaggaga | ttttcttccc | ccttcccttc | tcttttagat | gagtaaagt | 35760 |
| tttatctagt | tttgaggaga | ctatccttct | tatcacatct | ccttccactt | ctgctctcct | 35820 |
| tgttttataa | ttttcctctc | ccttgggtcc | gtgtcattat | ttcgtgtcgc | ttgttttcga | 35880 |
| gccatgcact | catttatcaa | atcagatttc | ctccgtatgc | cgacggcctt | cctctccctg | 35940 |
| ccacgggctt | cctttttccc | tgactatgca | gaagcaattt | gttcgcttgt | gtttcttttt | 36000 |
| ttttttgaga | cagagtctcg | ctctgtcacc | caggctggag | tgcatgtggc | acatctcggc | 36060 |
| tcactgcaac | ctccgcctgt | caggttcaag | caattctcat | gcgtcagcct | ccagagtacg | 36120 |
| tgggattaca | ggtgtttgcc | accaaggctg | gctaattttt | agtagagacg | gggtttcacc | 36180 |
| atgttgccca | ggcttgtctc | gaactcccaa | catcagttga | tccaccatc | tcggccttcc | 36240 |
| aaaatgctgg | gattataggc | atgaaccacc | gcactctggc | ttgtctttca | tccttaatga | 36300 |
| cacttttagtc | ctaataatgc | taaaatcatt | ttctactctt | tgaattgaaa | cacagcttat | 36360 |
| ctacatgagc | ccaaggcagt | agcaacattc | acctccattt | cttctctgat | ctctaccttc | 36420 |
| tgaaccctgt | ggacttgggt | gtaaatggat | gagggcaagt | cttgccttct | tccctgtgtg | 36480 |
| ttacagagga | tcgtggctga | gatgctgggc | cacactctgg | gcctgctggc | accctggggc | 36540 |
| cgggtggctgc | tgccctcag | ggtgctcacc | acctagacca | gaagaaccaa | ggtgagggag | 36600 |
| agcctgtttt | ctttcttctc | gtggctgcgg | gggctgtgag | gcattgggtct | agtggctgtg | 36660 |
| tttagctggg | gatgcctcct | agaaatcagc | tccaccgttg | aagagatcaa | agcaatgcac | 36720 |
| agtgccactt | gaaatgaaac | gattgagctt | atcagcgctt | ttgcaaatgt | acaagagggg | 36780 |
| agctcccccg | gacatcctga | actgagccat | gctcttctat | tttgtgtaac | agcccagtgga | 36840 |
| cccctgaatc | ttcccctgag | gcagggtccc | gaagcttcat | ggaggatgtt | cctcagctga | 36900 |
| ccaagggtgag | gctcttgagc | tcctaaatct | ttgtgatact | gtttatacat | ccttgtgctg | 36960 |
| tactttttaa | gctgacttcg | tgttatcacc | tgtatgattt | tatgttttgc | ttctaaataa | 37020 |
| gtacagatta | ttttaaacct | taataatggg | tgctacaaaa | ttaaagatta | tgtcaatcac | 37080 |
| tgtctctgat | gagttatttt | atgtagattt | caacacaatc | attgattcat | gtgtactctt | 37140 |
| ggtcagtcac | tagtcatctg | agtacctagt | gggtttccaa | aatgggtcct | ggatgctggg | 37200 |
| gatgcaaaga | taagcaacac | atttctatcc | tcaacagcct | gtagatgagg | gagaatcact | 37260 |
| gcggacaatc | aggggaagtta | cgggagagag | cagtgcacat | gtgggtctaga | aactgggtgga | 37320 |
| acaaagtgtga | gaatcactga | actaggagga | aagacagggt | actgacaatc | caaggcacag | 37380 |
| tgactcacac | tctaattctca | gcactttggg | aggccaaggc | aggaagatcc | actgagctca | 37440 |
| ggagataaag | accagcctgg | ctgacctatg | gagacccttc | tctacccaaa | aaaaaaaaaa | 37500 |
| aaaaaaaaaac | attagcctgg | catgggtggg | tgtgcctgtg | gtaccagcta | ttcaggaggc | 37560 |
| tgaagtggga | ggatcgcttg | agcccgagg | gtcaagactg | cagtgaatca | tgatcacacc | 37620 |
| attgcactcc | agcctaggga | agagagcaag | aaagaccctg | tctcaaaaac | agaaaaaat | 37680 |
| ccagtaaaat | gtttcagatg | ttgttaaagg | tgatttcact | gttacttttc | acctctcctc | 37740 |
| attttacatc | tctgacctat | gcttgtcctc | tgacttgcca | gacattccta | gctatggact | 37800 |
| tgatgtctcg | acatggaggc | tcacaggcac | cccaaactca | gcctgcccta | agctgaaccc | 37860 |
| atgatctttc | cttccaaact | tgttttctcac | cagagttccc | atcttatcat | ccacctagtt | 37920 |
| gttcaagtca | tccttaagac | ctccctctcc | ttcactgtct | attctacctc | cctaataatct | 37980 |
| cttaaatcct | tccctcctct | cccacctcac | agccaccatc | ctaacctaa | cagccaccct | 38040 |
| ttctcaccct | ataatgacct | cctggctgtt | ctctatagag | ttggtgaatc | ccttctgctt | 38100 |

| | | | | | | |
|-------------|------------|-------------|-------------|-------------|-------------|-------|
| cagcctgaac | cccctttcga | gggattctta | tatatataca | tagatataca | caaatatata | 38160 |
| tgtacatatg | tacatatgtg | tgtatatatg | tacatatgtg | tatggatata | catatgtaca | 38220 |
| tatgtggatg | tacatatgta | catgtgtatg | gggtgtacata | tgtacatgtg | tatgggtgta | 38280 |
| catatgtaca | tatgtgtatg | gggtgtacata | tgtacatatg | tatatgggtg | tacatatgta | 38340 |
| catgtgtgta | tgggtgtaca | tatgtacatg | tgtgtatggg | tgtacatatg | tacatgtgtg | 38400 |
| tatatatgta | catgtgtgta | tgtacgcatg | tacatatgtg | catgtatgtg | catgtgtatg | 38460 |
| tgtgtgtatg | tacacgtgtg | catatgtgtg | tatatgtgta | cacgtgtacg | tgtgtatata | 38520 |
| tatatatata | tatactggct | ggagtgcagt | gggaaagttt | tggctcacca | caaactccac | 38580 |
| ctcccagggt | caagtgatcc | tcctgcctca | gtctcctgag | tagctgggat | tacaggcggtg | 38640 |
| caccaccatg | cccagcta | ttttgtat | ttagtagaga | cggggtttca | ccatgttggc | 38700 |
| caggctgggtc | ttgaactcct | gacctcaggt | gatccaccca | cctcggcctc | ccaaagtgtc | 38760 |
| gggattacag | gcgtgagcca | ccgtgcctgg | ccggattcct | atcttgaaga | cgaagcccca | 38820 |
| gaccatcgac | acggcctcaa | ggccttgc | gacgcctcct | gccccaacac | ctcgtgtcat | 38880 |
| cttgctctcc | tctcccgcag | ctcctgaggg | tttagccacc | ctggaattcc | aagtccccat | 38940 |
| gggtcattttt | ttttcctgct | caagatatca | ccatgtgctg | tcccctctgc | ccttgtctac | 39000 |
| acccacgtgt | ccttctcccg | ccccggccac | actcatgggg | cacactgtcc | ttccctggct | 39060 |
| aatcctccca | cactcgatac | cactttctct | gggatattgc | acccgatcct | cagccgcagt | 39120 |
| tgtcttccca | tgacccactc | ccacactctc | gccacaatgg | taattgtttg | attcctactt | 39180 |
| gttgtccctg | tgagactgca | aaccccagag | gacagggggc | ctgggttctc | cttcgcctct | 39240 |
| ggatcatcag | cactaactga | atacctggcc | tagaagagat | gctaacgatg | ctgaatgaat | 39300 |
| aaataagtgg | aaagactctc | agtaaagcaa | aacctttctt | taccatttta | tgcccgctcaa | 39360 |
| ggaggaaaac | acattatcag | tggaaaacgc | aaaatgaggg | gatttgctta | gcaaacgatg | 39420 |
| aattcctctg | gcaccttggc | agccttgggt | tcttttgatg | agggtccacc | ccttccatcc | 39480 |
| atcttctggg | cttaagagat | caaagcaaaa | catgctgtgg | aattcgatac | tgggtgcagg | 39540 |
| tgcacaacat | tgtgactgaa | ctaaaagcca | ctggatggta | caactgaaaa | tgggtgaattg | 39600 |
| cgtgttgc | gaattataac | ctaactgggg | aaaaaaaggc | ttaaaaagag | acaaagcttc | 39660 |
| ccccacaatg | gaaaggaagg | tataatagaa | acagcagctt | tcaaaccttg | gcaggataat | 39720 |
| gaaaccccg | ttctat | aaaaattagc | tgggtacagt | ggcacgtgcc | tgtagaccca | 39780 |
| gctactcggg | aggctgaggg | tgggaagatc | cttgagccca | ggagtccaag | gctgtggtaa | 39840 |
| actataatca | cactactgca | ctccagcctg | gggtgacagag | aaagaccctg | tctcaaaaaa | 39900 |
| ggaaggaaag | aaggaaggaa | ggaaggaaag | agggagggag | ggagggaagg | aggggaaggaa | 39960 |
| ggaaggaaag | aaggaaatag | cagctctgag | cttagaaata | ggagtctatt | tctaagtggg | 40020 |
| agatggggag | aaggagggaa | ctggggaggt | gaggaagaag | cagggtattgt | caccagtgtg | 40080 |
| gactgtgctg | ttgtgagccc | agctaggcaa | ctggcaattc | cattctgtta | gtgacagcta | 40140 |
| caataaccca | aagccctctg | gagccctgct | ttcctctgct | ctcttcgtgg | cttgactagg | 40200 |
| agctgaagat | cctgtccctc | ttagagcatt | ggggcggccc | acccacctc | caccctcctc | 40260 |
| cacctgctgc | ctcgaggccc | ctcccactcc | cggggtagac | aaaacagttt | agaggctgaa | 40320 |
| gtcaccgggg | ctgtaactgt | tggatttgca | catgtcatag | aaaatcatca | tatgttttgt | 40380 |
| gtggactcca | tgcataacaa | caagagaacc | aaccagaccc | catagacaga | agggagtgtg | 40440 |
| aattgaggag | aaaattttaa | ttatgagttg | ccttctattc | agatttctcc | catttttaac | 40500 |
| aaaaaggagc | ccaaattcct | aaatggtatg | gttgtttgca | gcaacttata | atctttctcc | 40560 |
| tttcttcat | agccaagggt | tttgaaagag | ctatctgagg | ccgggaatgg | tgactcacgc | 40620 |
| ctgtaatcct | agcacagagg | ctgaggtgag | tggatcacct | gagggtcagg | gttcaagacc | 40680 |
| accctggcca | acatggcgaa | atcccgctct | tactaaaaat | acaaaaatta | gccgggcatg | 40740 |
| gtggcggtgtg | cctgtaatcc | cagctactca | ggaggctgag | gcaggagaat | cacttgaacc | 40800 |
| caggaggtgg | aggttgcagt | gagccaagat | ctcaccactg | cactccagcc | tgggcaacag | 40860 |
| agtgagactc | catctaaaac | aaaaaaaaaa | gtagctgtct | gttctttctt | ctcgaaactct | 40920 |
| ttttcccgct | ggagtctgtg | acctgctgcc | gtctgcctca | agtgtgaggg | actagcagat | 40980 |
| ctgggtgaatt | accttcta | gcccgtaccc | tgcccatacc | agcttcaatc | tgtatgtaga | 41040 |
| agcttagctt | gtcccatgca | tggcctccag | catccactgg | tcacaaaata | acacaaaata | 41100 |
| gcatgagaga | gaatggctgc | atggagcgga | ggagctgctg | agactgaacc | caagccaggg | 41160 |
| ctactgctgg | gtggaactgg | acatgcccg | cccatgggaa | agtcttccca | cagaagtc | 41220 |
| atttgcaggg | gtctcccagg | agacagcaca | ttctgagcaa | aggagtgtgg | cagagataac | 41280 |
| tattcaggaa | ccaagagact | cgctggaaa | aagcagagat | tttcagccca | gcgtagtgg | 41340 |
| tgtttcttga | atcttcccct | gtggatgccc | caaaccttga | gaccttcca | acaaatagca | 41400 |

| | | | | | | |
|-------------|-------------|-------------|-------------|-------------|-------------|-------|
| cactactaac | aaactgtgac | tcaaagagag | ggaaacatgg | tcccctgctc | tgtcacaaat | 41460 |
| cactgtgaag | ctttggcacc | ctgactgctc | aggtggccac | caacacagaa | ggaccacgaa | 41520 |
| tggctgagtc | aggaagtcac | agccgtgtgg | ctggaagagg | ctctgccttg | ctctgggaga | 41580 |
| aatgcctatc | cccaaggaag | ccttagtatc | catgggagag | aaacactgta | gcaatggccc | 41640 |
| ccaggactct | cgggaagcca | cttctgggtg | gaggggactc | aaaggggtgct | gggggacctg | 41700 |
| tgtctgcata | tgggaagtga | gagccaggaa | aattttcttt | cagtttcttt | ctttttcttt | 41760 |
| ttcttttttt | tttttttttt | ttgagaaagg | gccttgccct | gtcgctcagg | ctgaaacata | 41820 |
| gtgggtgcgat | ctcggtcac | tgcaacctcc | acctcccagg | ttcgagtgat | tctcctgcct | 41880 |
| cagcctcccg | agtagctggg | actacaggca | tgcaccccca | cccacgccc | gctaattttt | 41940 |
| gtattttttg | tagagatgtg | gtttcgccat | gttggccagg | ctgggtctga | actcctggcc | 42000 |
| tcaagtgate | ctcccgatgt | gctgggatta | caggtgtgag | ccaccacgcc | cggcctcttt | 42060 |
| ctgcttcatt | taacattaat | ggcatcccca | cagcatgggtg | ctgtgcacct | gtagtccag | 42120 |
| ctactcaggt | ggctgaggtg | ggagaatcac | ttgcgttcca | gctgtagtga | gccttgattg | 42180 |
| tgtctgtgaa | taaattgccac | ttctctccag | cttgagcaac | atagggagac | tgtctcttaa | 42240 |
| aaaacaaaac | aaaacaggct | gggctcgggtg | gccacgcct | acaatcccag | cactttggga | 42300 |
| ggccaaggca | agaggattgc | ttgagcccag | gaggtcaaga | gcagcctggg | caaaataggg | 42360 |
| agaccccatc | tctacaaaaa | gataaaaaat | aaaaaaatta | actgggcatg | gtgatacacc | 42420 |
| tgtagtccca | gctactctgg | aggtgagat | aggagtattg | cttgagcctg | ggaggtcgag | 42480 |
| gctgcagcga | gccatgatca | tgccactaca | ctccagtcca | ggcagcagag | tgagatcccg | 42540 |
| cctcaaaaaa | ataaaaacaa | acaaaactca | tctctccctt | ggctcctgag | actacaatcc | 42600 |
| ctcacggttc | ttttctactt | ctctgttttt | ctcttcttgt | ctcccttttt | ttctgggtctc | 42660 |
| tctgtcaccc | aggctggagt | gcagtgggtg | gatcatagct | cactgcaacc | ttgacctctc | 42720 |
| gggttcaaga | gactctccca | cctcagcctc | tcgagttagct | aggactacag | gctcacacca | 42780 |
| ccatgcctag | ctaataatttg | tagattttgt | agagatgggg | tcttgctatg | ctgtccaggc | 42840 |
| tgggtctcaag | ctcctggcct | caagtgatcc | accacacctc | gccacccaaa | gttctgggat | 42900 |
| tacaggggtg | agccaccgcg | cccagccgat | aattgttgaa | aaatcatttt | cagttaagggt | 42960 |
| atccagtcac | ggtcagaaaa | tgagaaaatg | ttaaaaaaaa | aaaagctata | agtaaaacag | 43020 |
| attcagtcgg | gacatgatgg | ttcacgcctg | caatcccagc | actttgggag | gttgaggtag | 43080 |
| gataatcact | tgagcccagg | agttcgagac | cagcctgggc | aacatagcga | gaccttatcc | 43140 |
| atacaaaaaa | atttaaaaaa | taccaggcca | tgggtggcata | ctcctgcatt | ccctgctaata | 43200 |
| tggatgggtg | aaggggagga | tcccttgaaa | taggagttaga | ggtgcaggaa | atatgattgt | 43260 |
| gccgtgtaat | ccagcctggg | tgacagagca | agatgttccc | cacccccctg | aaaaaaaaaa | 43320 |
| aaaaaccta | atccaaattt | taaaagtttc | cttgactctt | caacttgctc | accctccacc | 43380 |
| aaataaaata | actacgaagg | aggcttattt | tttactattt | ccagggatac | gatatatgtt | 43440 |
| tgtcctgaaa | atatacatca | tggctttact | caagccacag | tgatgaggcc | tcattgtcac | 43500 |
| tgtagcctaa | ttacgatttt | ataactccat | ttaaaattca | atttaaacac | agtttaaaaa | 43560 |
| ttcagtccaa | gtcaaaccatg | ctctcagtag | ctagaagcaa | aactctgttc | aggtecttga | 43620 |
| tggatctatt | tgtactttct | ttcatgaaaa | cagaaagtcc | ttttttacac | accatgcaac | 43680 |
| aggaaaattc | ataacggaca | ttgtttttacc | tgttcttggc | aaagacaagt | gagctcttaa | 43740 |
| caagcaaggt | aactatggag | atgatgtttt | gctccaagtt | aacacttaca | tatttaatta | 43800 |
| gaaagatttc | aaaggtgggc | agatttactg | gaaagtttcc | aaaagcttca | cttgttcaac | 43860 |
| aaataatgtt | agagagggag | caccgtgccc | tcgggcccct | aggaattagt | tccacatggg | 43920 |
| ccggtcctct | gtccagtggtg | cccagcatcc | acttgggaga | acagcatggc | cttctgtcca | 43980 |
| gggcagccca | cggcagcact | gcctgcccct | tcaggcccat | ggctcccatt | aagtgccatt | 44040 |
| tcgagcatac | ttagccaagt | ttccctacca | tggccaacaa | agaggttgtt | caaaaatgct | 44100 |
| tgtcaggtcg | ggcatgggtg | ctcacgcctg | tagtcccggc | actttgggag | gctgaggcgg | 44160 |
| gtggatcacc | tgaggtcagg | aattcaagac | cagcctggcc | gacatgggtga | aaccccgctc | 44220 |
| ccacaaaaat | acaaacatta | gttgggcatg | atggcgggtg | cctgtaatcc | cagctgctca | 44280 |
| ggaggctgag | acaggagaat | tgcttgaacc | cgggaggtga | aggttgactc | gagctgagat | 44340 |
| cacaccattg | cactccagcc | tgggcgacag | agtgagaatc | catctcgaaa | aaaaaaaaag | 44400 |
| tttgtcaacg | gttttactga | atccagaata | cttttctaaa | atgtcaaccc | tatagaatac | 44460 |
| attttataaa | attatgaagg | cctgggtctg | tgtagtggct | cacgcttgta | atcccagcac | 44520 |
| tttgggcagc | caaggcaggt | ggatcgcttg | aggctgggag | tttgagacta | gcctggccaa | 44580 |
| caaggcaaaa | ccctgactct | actaaaaaat | acaaaaatta | actgggcgtg | gtgggtgcaca | 44640 |
| cctgtaatcc | cagctactca | ggagggttag | acaggagaat | cacttgaacc | caggaggtgg | 44700 |

| | | | | | | |
|------------|-------------|-------------|-------------|-------------|------------|-------|
| aggttgacgt | gagtggagat | tgcgccattg | cactctagcc | tgggtgacag | agcaagactc | 44760 |
| tatcttcaaa | aaatagataa | ataaataaaa | attaaaacaa | aataaaaattc | tgaaggcctt | 44820 |
| aggtcagaga | attaccgagg | gaatattcaa | agttatacct | ccaagtatct | acaatgaaga | 44880 |
| tactttcatc | agaaaaaagg | agtttacggc | caggccctgt | ggttcatgcc | tataatctca | 44940 |
| gcactttggg | aagccaaggc | tgaggcagga | ggatcacttg | aggccaggag | ttcgagacca | 45000 |
| gcctgagcaa | aaacgtgaga | tcccatttct | acaaaaata | aaaatgtaag | gtaggcatgc | 45060 |
| aactgtagtc | ccagctactc | gagaggctga | ggcaagagga | tcgcttaaac | ccaggactcc | 45120 |
| agcctgagca | acagagcgag | accctgttta | taaaaaaaaa | agaaaaaaaa | aaagaagaag | 45180 |
| aagaaggaga | agaaaggaaa | taaaatttaa | gaaaaaaaaa | aggacttaat | aagggtgaat | 45240 |
| gaaggcaaga | atattcttag | ctctgtttta | gtcaagacct | gagtagtagc | tctacgtagc | 45300 |
| tgtatgtcga | taatgttttt | gagacagcac | tactgataaa | ttgttacata | ataaactggt | 45360 |
| atggctggat | gcagtggctc | atgcccataa | tcccagcacc | ttgggaggcc | gaagtgagtg | 45420 |
| gatcacctga | ggtcaggagt | tcgagactag | cctgatcaat | atggtgaaat | cccatttcta | 45480 |
| ctaaaaaat | aaaaattagc | tgggcatggt | ggcgcacctg | taatcccagc | tactcaggag | 45540 |
| gctggggcag | gaggattgct | tgaaccagg | agacagaggt | tgcagtgagc | cgagattgcg | 45600 |
| ccattgcact | ccagcctaga | agacagagcg | agactccatc | tcaaataaat | aaactgttaa | 45660 |
| attaagttaa | gcctaaagct | acccctttac | atatttttaag | ttcagttctaa | aggtttccct | 45720 |
| gcacatagtg | aactgtaacc | taactggatg | cgtaaacaga | ctataaccta | ctcttggggc | 45780 |
| agtcactgag | ttttgggtcaa | tcaaaggcag | ccaactgttc | aaaccagggt | aaaataaggc | 45840 |
| agatgctgag | ctctaaccag | tccagccatt | tctgtacctt | gcttccattt | tctgtccatc | 45900 |
| actttccctt | ttctgtccat | aaatcttcca | ccacgtggct | gtgctggagc | cactgtgaaa | 45960 |
| ctattctggt | tcaggggctg | cccaattcat | gaatcattcc | ttgctcaatt | aaactctggt | 46020 |
| catttaattt | gtctaataatt | tttcttttaa | tcaaagtaat | ttggccgggc | acagtggctc | 46080 |
| acgcctgtaa | tcccaacact | tcgggaggcc | gaggtaggtg | gatcacctga | ggtcaagggt | 46140 |
| tcaagactag | cctggccaac | atggtgaaac | cccgctctcta | ctaaaagtac | aaaaattagc | 46200 |
| cgggtgtggt | ggcgggcgcc | tgtaatccca | gctactcggt | aggctgaggg | aggagaatcg | 46260 |
| cttgaaccgg | ggaggtggaa | gttgtagtga | gctgagattg | tgccattgca | ctccagcttg | 46320 |
| ggcgacaggg | caagactctg | tctcaaaaaa | aaaaaaaaaa | ttaattcaga | gacctactca | 46380 |
| tgtgaagttg | tattttttta | ttctccatat | tacaaaacag | aacaattggc | acagggatga | 46440 |
| agaaatactt | tgcaaaacat | ctagagaggt | taaatgccat | gagtccttaa | aatgtaagac | 46500 |
| tgctttcacc | tgagcaatct | agtgtccatt | tctagagcta | gcttaaatgt | ccgtgtaaat | 46560 |
| ccccgtaatt | ggttgggata | acaattacct | atgttgtata | acttgagtca | aaaactacgt | 46620 |
| ttccactgcc | tgccaccctt | atggatgggt | ttctcttaag | gtatcaaatt | ttactgggaa | 46680 |
| agacctagat | aaaatacagc | gaaaatgagg | cggggcgctc | tggcacatgc | ctgtaatccc | 46740 |
| agcgcttttg | gaggetgagt | cagaaagatc | tttgaattca | ggagttcaag | accagcctgg | 46800 |
| gcaatatagt | gaaatcctgt | ctttacaaaa | aattaaaaat | tagccaggca | tgggggcatg | 46860 |
| ggcctgtagt | cccagctact | tgggttgggt | gactgatgtg | ggaggatcac | ttgagcccag | 46920 |
| gaggttgagg | ctgcagtgag | ctctgacct | gcccctgcac | tccagcctgg | gtgacagagc | 46980 |
| aagaccagct | ctcaaaaaga | aaagaaaaag | agtaatgtta | ggtcaaggta | gaacctacct | 47040 |
| tgactttctg | ttactatgga | agatattctg | gggtatctct | gagatccaag | tattatggca | 47100 |
| cttaagtaat | tctatctat | tggtctactt | gggtcctcgg | gagtaaaagt | catattcaaa | 47160 |
| ccaaaaaggc | tgtgggattt | ccagaatttt | aaaagcaata | atagttaatg | ttctcccatg | 47220 |
| ggagttactc | cacattttta | catatgttcc | atatgttaac | tcatttagac | cttaccttta | 47280 |
| tgaggtaagt | cctcttctta | tccccacttt | agaggtggga | aaactgaggc | acagaaagag | 47340 |
| taagtgtgct | gcctaaggcc | ctgttactag | caggtgggtg | aaccagcatt | ccaaccggg | 47400 |
| agtctggcaa | atgtgtgtga | agagcacacg | tttggaatg | acagtcatga | ggacactgta | 47460 |
| agacttctgg | aatgtttata | atttcacctt | tgcttggtat | ttttcctgtc | tgtttcccta | 47520 |
| gagtgaactg | agtgaaaaaa | gaaagaagaa | agaaagaaga | aagagaaaga | gaaagaaggg | 47580 |
| agagaaaaag | aaaaaagaaa | agaaaaacag | aaaaagggaa | agaaagaaga | aatgaaagaa | 47640 |
| agaaaagaaa | agaagaagaa | aaagaagag | agaaaggaag | gaagggaagg | gggaggggag | 47700 |
| gaaaggaaga | agaaagaaag | aagggggaca | gagggaggga | atgaaggagg | gagagaggga | 47760 |
| gggaaggagg | aagaaataaa | aagatgagga | tctgtatgct | tgaggggtgg | aggtgggggg | 47820 |
| cttgggtggg | agtgtgggat | gggcagaaaag | ctggaggggag | ccctggaccg | actgcattcc | 47880 |
| acagaggatt | gtgggtgcaa | cgtagggtggc | agattgagaa | aagcaaacaa | acaagctcag | 47940 |
| cctttggagc | ttcggggaag | aaaaaaagct | gagcagtga | tgctggcttc | ccacggagaa | 48000 |

| | | | | | | |
|-------------|------------|-------------|-------------|------------|-------------|-------|
| ggcaggctgc | ttcgccagct | cacatccttc | cgcgcaccca | cttcctcttt | ccggagggtca | 48060 |
| cttttagattg | ctttatggca | ggatctccag | gtcacaggaa | tggtatgttt | cgactgggggt | 48120 |
| ttccccctcc | cctgggatgc | ctggggccagc | tccccaaagg | ctagtctctg | tcccaggcccc | 48180 |
| cacactccca | tagcactcag | caaaagccta | gagagagcac | cgcaaaatgc | caaacgcaac | 48240 |
| aggaccgcgt | aggaagaaga | cgcttggaat | gacagggaca | ctagaactgc | ccatgggtcgt | 48300 |
| gggtctcaa | ttttgttcca | tggtctgaaa | tactaaaagt | tcttaaacag | ctacttgatt | 48360 |
| tcatactatt | gttttgaaga | aaacagtgtt | tggttgttgt | tttgtttgtt | tggttgtttg | 48420 |
| agacagagtt | ttgctcttgt | tgccgagttt | gggccatgtt | ggtcaggctg | gtctcgaact | 48480 |
| cctgacatca | ggtaatccac | ccacctctgc | ctcccaaagt | gctgggatta | caggaaaaca | 48540 |
| gttgtttctt | taaaacaatt | atataggctg | ggcacggtag | ctcatgcctg | taatcccagc | 48600 |
| actttgggag | gctgaggtgg | gtgaattacc | tgaggtcagc | agttcgagac | cagcctggcc | 48660 |
| aacatggtga | acctcgtct | ctactaaaaa | tgcaaaaaat | tagccgggcg | tggtggtgca | 48720 |
| ttcctgtaat | accaggtact | caggaggctg | aggcaggaga | atcacttgaa | cccaggagggt | 48780 |
| ggaggttgca | gtgagctgag | atggcaccac | tgcactccag | cctgggcaac | aagagcaaaa | 48840 |
| ctccatctca | caatctcaaa | aaaataaaaat | aaaataaaaat | aaaataaatg | gttatataag | 48900 |
| ctaccttatt | gatgcagtta | caaataagcc | gctgaaacat | ataaatttta | aagaacaagc | 48960 |
| cacatatctt | tcatacccca | cagcttcacc | aactaaagggt | gtatgtagta | cttttgtgga | 49020 |
| aggcatttcc | acatgctttg | agggaccttg | aaatactgct | atgattacat | gatttttcta | 49080 |
| aaaccagact | actcctacat | tacaagaatt | gaaaagttca | gagtaaata | ttgtaagacc | 49140 |
| tagaaaagat | gatgttcttt | aaaaaaaaacg | atgcccctct | ttgtagcgaa | aagaaagaga | 49200 |
| gatcagactg | ttactgtgtc | tatgtagaaa | cagaagacat | aagagactcc | attttgaaaa | 49260 |
| agacctgtac | tttaacaat | tgctttgctg | agatgttgtt | aatttgtagc | tttgccccag | 49320 |
| ccactttgac | ccaactactt | tgacccaacc | ggagctcac | aaaaatatat | gttgtatgaa | 49380 |
| atcaaggttt | aagggtacta | gggctgtgca | ggacgtgctt | tgtaacaaa | atgtttgcaa | 49440 |
| gcagtatact | tggtaaaagt | catcgccatt | ctctagtctc | aataaaccag | gggcacaaag | 49500 |
| cactgtggaa | agccgcaggg | acctctgccc | tggaagcggt | gggtgtgtcc | aaggtttctc | 49560 |
| cccatgtggt | agtctgaaat | atggcctcgt | gggatgagaa | agacctgacc | atccccccagc | 49620 |
| ccaacacctg | taaagggctt | gtgccgaggt | ggattagtca | aagaggaaag | cctcttgtag | 49680 |
| ttgagataga | ggaaggccac | tgtctcctgc | ctgcccctgg | gaactgaatg | tcttggtata | 49740 |
| aaacccgatt | gtacatttgt | tcaattctga | gataggagaa | aaaccgccct | atggcgggag | 49800 |
| gcgagacatg | tttgtagcaa | tgctgccttg | ttattcttta | ctccaccgag | atgtttgggt | 49860 |
| ggagagaaac | ataaatctgg | cttacgtgca | cgtccagtca | tagtaacttc | ccttgaactt | 49920 |
| aattatgacg | tagattctgt | tgctcacatg | ttcggtgctg | accttctcct | tattatcacc | 49980 |
| ctgctctcct | actacattcc | tttttgtctg | aataacgaag | ataataatca | ataaaaactg | 50040 |
| agggaaactca | gagatggtgc | cgggtgcagg | ccttggtatg | ctgagcgccg | gttccctggg | 50100 |
| cccactgttg | tttctctata | ctttgtctct | gtgttttatt | tattttctca | gtctctcgtc | 50160 |
| ccacctgact | agaaatatcc | acagggtgtg | aggggcaggc | caccccttca | catcttgtct | 50220 |
| ccacttcctt | gattaaaaaa | aagaaaagaa | aaaaaaattt | gccgaagttg | gattcattca | 50280 |
| cagaattcta | cacattaaaa | atggtgcagg | tcgggtgtgg | tggcagctcc | caaagctgcc | 50340 |
| tataatccca | gcgctttggg | aggcttgagc | ccaggaggct | aaggctgcag | tgaactgaga | 50400 |
| tcgcaccact | gcactccagc | ctgggcgaca | gtacaagacc | ctgtctcaaa | gaaaaaaaaa | 50460 |
| aaaacagaaa | aaaataacgt | tacagaaaaa | gtacaatatt | tttaatatat | atatatatat | 50520 |
| tttttttttc | tgagacagag | tggtgtctct | tcacccaggc | cggagagcta | tggtctgata | 50580 |
| tcagctcact | gcaacctcca | cctcccgggt | tcaagcgatt | ctcctgcctc | agcctcccga | 50640 |
| gtagctggga | ttacaggcac | ccaccaccac | gcctggctaa | tttttgtatt | tttagtagag | 50700 |
| acgggggttt | cccatgttgg | ccaggctggc | ctcgaactcc | tgactttatg | atccgcctgc | 50760 |
| cttggcctcc | caaagtgttg | ggattacagg | tgtgagccac | catgcccagc | caaaagtaca | 50820 |
| atatttttaa | tgacatataa | agatgttcat | tctttgtggg | tgccctgggt | gagagggact | 50880 |
| attgatactc | aatagtgttt | cttttgtttc | tacattgttt | ctatagttaa | aatacgcatt | 50940 |
| ggctttgtat | taaaaaatgt | atagtaaaaa | tggttttatt | aaaaatagca | aataactaca | 51000 |
| aaaactccat | tgcaatggaa | agcagccctt | ggattttcta | gttgaatgaa | acgagtaatt | 51060 |
| tatccaatgt | tagaaatgtc | taaaggctcg | ctcaggtttc | atgagcagaa | cagggaattgt | 51120 |
| atatccaatt | aaatgtgaaa | ttgcaatgcc | tggtgcgggt | gcttatgcct | gtaatcccag | 51180 |
| cactttggga | agccgaggca | ggggatcgct | tgagcccagg | agttcgagac | caccatgggt | 51240 |
| aacatgggga | ggccccatct | ctacaaaaaa | taaaaatcgt | tagccgggca | ggttggtgca | 51300 |

| | | | | | | |
|------------|--------------|-------------|-------------|-------------|-------------|-------|
| tgcttgtgtt | cccagctact | tgggaggtcg | aggtggaagg | atcctctgag | cccaggagga | 51360 |
| tgaggctgca | gtgagacatg | atcgatgcac | tccagcctgg | atgacagagt | gagaccctgt | 51420 |
| ctcaaaaaaa | aaaaaaaaaaga | aaagaaagta | caatcgcaat | taaatgtctt | tgcgttgggtg | 51480 |
| gctcctgacc | aaattcccta | agcaagcagt | atgttaatga | gcagaggggc | cacagctcac | 51540 |
| cttgctcaat | taaaggcagg | agcaggccgg | gcgtggtggc | tcacgcctgt | aatcccagca | 51600 |
| ctttgggagg | ccaaggtggg | cggatcacga | ggtcaagaga | tcgagaccat | cctggccaac | 51660 |
| atggtgaaac | cctgtctgta | ctaaaaatac | gaaaattaac | tgggcatgtg | gcatgagcct | 51720 |
| gtaatcccag | ctactcggga | ggctgaggca | gaagaattgc | ttgaaccggg | gagggtggagg | 51780 |
| ttgcagttag | ccgagattgc | accactgccc | tccagcctgg | tgacagagcg | agacttcac | 51840 |
| ttaaaaaaa | aaaaaaaaa | ggcaggagca | agtatgggcc | agacagaaat | caaggtgtaa | 51900 |
| attgggcaga | tctcaggcc | cagtgtctgaa | ttttggtttg | atgaaataaa | acattacatt | 51960 |
| tcaaggttgg | cagagaggaa | tgaaggtgga | agaggaatct | agggccattt | aggggaagcca | 52020 |
| tgaagcctcc | tgcccacact | agtgggtaga | gtggagccag | gcgttttgc | agggttgc | 52080 |
| atatctcttg | gcagggtgct | ctgctgccaa | agccaagaat | tctaaattag | attaaatagc | 52140 |
| cagaaagaat | gttaaacatt | tggacatgat | atcctccctc | acagattagc | tagagtgtag | 52200 |
| ttctgctgtg | ctagatactt | aaataaatac | ctccctagct | gtgaagcctg | cttatcacag | 52260 |
| tactatattt | taggatgagg | tcattatattt | cctatgcata | cacatgcatt | gtataatctt | 52320 |
| gccaatgtag | gtcagcccaa | aagaagtgc | aaatgtgtag | aacacacatt | ggactagctt | 52380 |
| gggacaaaat | tagtatacct | aaagatgaca | gatttcttaa | ctaattttat | gagccatgca | 52440 |
| gctttgtatt | ctagcagaga | cagacattag | gaatcttata | aaatcaaaaa | ttttaatttt | 52500 |
| tgctgaata | gtcccaaagg | gctaagatct | caagcaaatg | cgtgtagggt | ttgtttttgt | 52560 |
| ggttgttgtt | gttttttagag | acagggtctt | gctctgtcac | ccatgctgaa | gtgcagcggg | 52620 |
| gcagctctag | ctcactgcag | ccttgacctc | tcaggcttaa | gtgatcctcc | tgcccttagcc | 52680 |
| tcccagtag | ctgggactac | aggcgcatgc | caccaccccg | agtaattttt | tatttttatt | 52740 |
| tttacttttg | tagagacagg | ggtctcaata | tgttgctcag | gctagtatct | ttttctttt | 52800 |
| tgagacagtc | tcgctcaatt | gcccaggctg | gagtgcagtg | gtgccatctc | ggctcactgc | 52860 |
| aagctccgcc | tcccgggttc | acgccattct | cctgcctcag | cctcccaggt | agctgggact | 52920 |
| acaggcgccc | gccaccatgc | ccagctaatt | ttttttgtat | tttttagtaga | gacgggggtt | 52980 |
| caccgtgtta | gccaggatgg | tctcgatctt | ctgacctcgt | gatccacccg | cctcagcctc | 53040 |
| ccaaagtgtc | gagattacag | gcgtgagccc | tcgcgcccgg | cccagtcttg | taacttaact | 53100 |
| ttaaagctac | ttattcccaa | atgaagatgg | gatggtacac | agattttaag | tatttagctgg | 53160 |
| tttgagactt | ctgtctttta | aagcaacatt | ttactttgcc | acagggtggg | ggggcggggg | 53220 |
| ccatcctaga | agaagagtg | tgagtttcat | gggatagggt | ctggggagggt | ggctggaggga | 53280 |
| gttttaggtt | ttttgatata | tgtggctaca | cagacagata | accaaggaaa | atgtccaaac | 53340 |
| agtgaattaa | agtgtcact | gcactaacac | agagaaggac | cctgatgtct | ggccgcaggc | 53400 |
| ctttgttctc | attggcttca | aagaacttct | tgatgtctac | cttaatttca | ttattattta | 53460 |
| cccaggagtc | attcaggagc | aggttgttca | attgccatgt | agttatgtgg | ttttgagtga | 53520 |
| gtttcttaat | actgagttct | aatttgattg | tgtgtgggtc | tgagacactg | tttcgatttc | 53580 |
| agttcttttg | catttgctga | ggaatgtttc | atttccaatt | atgtggtcga | tttttagagta | 53640 |
| agtgccacgt | gacgtcgaga | agaatacaga | ttctgttgat | ttcggggggg | agagttctgt | 53700 |
| agatatctat | taggtccact | tgatccagat | ctgagctcaa | gtcttgaata | tccttattca | 53760 |
| ttttctgtct | cgttaatctg | tctaataattg | acagtggggg | attcaagtct | cccactatta | 53820 |
| ttgtgtggaa | gtttaagtct | ctgtgtagggt | ctctaaaaac | ttgttttatg | aatctgggtg | 53880 |
| ctcctgtatt | gggtgcata | gtatttagga | gagttagctc | ttcttgttga | attgctccct | 53940 |
| ttaccattat | gtaatgccc | tctttgtctt | ttttgatctt | tgttgggata | aaattacatt | 54000 |
| ttatgtcccc | cttctatag | tttgtcactg | agggttggca | gaagttgaaa | ggaagaagac | 54060 |
| atttgggtgt | ttgggttggg | gttatattag | gttataagggt | tcattgcctc | cacctctttc | 54120 |
| aaaacattta | gtttctaaat | gaatccagct | ttaaatgact | gcaggagtgc | ccatgcacaa | 54180 |
| ttttgtttct | caaactcttg | ggatttttcc | ttgaagaata | ttcacaggga | atggggctgt | 54240 |
| cttgcttcat | agttactctt | ttgtatacat | gatctcaaga | atcgctgat | cactgctaga | 54300 |
| gttaaaccac | tacactaact | gcctgaagtg | ctgaaaagtc | aaatgggggc | ttagaacctc | 54360 |
| actccagatc | ctacacaagc | tgatgggtct | gttcccagaa | acaaccagc | ttcctcatca | 54420 |
| tctatggcca | gtgccttgta | gcggagctgg | agatcaccct | ttagtgggct | cttcagctgg | 54480 |
| atctagaaat | caaattgaca | ccaggcagat | taacaagaga | aaagtataca | gattttattg | 54540 |
| cttttatatg | tacttgggaa | tctgcacaag | ggcaaagtcc | gaagaggtgg | ccaaagcaag | 54600 |

| | | | | | | |
|-------------|-------------|-------------|-------------|-------------|-------------|-------|
| gtgcttttat | acatttttag | aaaaagagcc | aaaaaattgg | agaagaaatg | ataggacaaa | 54660 |
| gaaaatctag | ccaggcagta | aatttttctag | gagaatcact | aggacatata | tgagggaaggg | 54720 |
| tgtgtaaaac | aggtgaaaga | taagggctag | ttcattaaac | atgtttactc | tggtccattg | 54780 |
| tagcctctac | gataaggagt | attttctcgc | tctggtgtgg | acagggcacg | cctcccagag | 54840 |
| caacctttat | cacttactgc | atgcaggaag | agacaggtca | gcccgcctt | cctgaaacta | 54900 |
| caattttcttc | agtgttttca | actcaaaata | atcaataccc | cccatctggc | atatctgggg | 54960 |
| atggcacgtc | ctttactcct | tcaggctctt | ctccctgaag | gtcctttgca | tagttgggaa | 55020 |
| tctccaccag | gaggggtagc | tctttggtct | aaacccatgg | tggcagagtt | tcgacaatat | 55080 |
| tcccaactta | aatgtttctg | attctgagtg | gtggttagat | ccctttgtac | acccctgtcc | 55140 |
| ccagtgccta | cagaatgggc | atgttaataa | gtgttggtcg | aacattcaat | gatggataag | 55200 |
| gaagaatagg | aggcaagaga | gacggtggtc | tccagtgcc | agccccagtg | ctaactgggg | 55260 |
| tgattttttt | tcatgactca | ttttcctaaa | atcacctca | agggtcctac | aaaactcttc | 55320 |
| ccaacagcta | aatcacagac | taatctggcc | catcgacgtc | ttccctgatt | atactaattt | 55380 |
| ttttgtgttt | ttttttttga | gatggagtct | tgctctgtca | cccaggttgg | agtgcaatgg | 55440 |
| cactatctca | gctcacagca | acttccacct | cctgggttca | agcgattctc | ctgcctcagc | 55500 |
| ctcctgagta | gctgggactg | ccagcatgcg | ccaccatgcc | cggctaattt | tttttttttt | 55560 |
| tttttttagta | gagatgagat | ggggtttcac | catgttggcc | aggggtggtct | tgaactcctg | 55620 |
| accgcaagtg | atccgcttgc | ctcggcctcc | caaagtgtct | ggattacagg | tgtgagccac | 55680 |
| tgcgcccagc | catatattaa | tggtttttga | tgaatttggt | ccatagatta | aaatcttgtg | 55740 |
| ccccatcgcg | tgtggggctc | catcgcatgt | ggggcacagg | gttccctgagt | gtttgtggct | 55800 |
| gtcaaaccaa | gatgatttct | tgcttaatca | agcagatttg | aaagttcatc | tctgctacca | 55860 |
| ggaagcactt | gctcaactca | gaagacaatg | tcctatcagt | ctttcactat | cacgcactcg | 55920 |
| ttcttcaaga | tcgctcaaat | tagctccagt | gaaacggagg | ctaaagtga | actttttctc | 55980 |
| ttatatagat | ttttattcat | aactagggaa | aaatttaggca | cccacagaaa | aataataacc | 56040 |
| taaaaaaatt | aggctgaacg | taagaaaaat | ttgtgatgaa | ataaacattt | caatcaacag | 56100 |
| aaaatatattt | tctgactttt | tatgtgccac | cattagttac | atcattgaga | aaacaatatt | 56160 |
| tgtattaaaa | aaagagctgg | tgaaaatctg | gcaattgggtc | gggcatagtg | gctcgtgcct | 56220 |
| gtaatcccag | cactttggaa | ggccgaggca | ggcggatcac | ttgaggtcag | gagtttgagg | 56280 |
| ccagcctgac | ccacgtgggtg | caacccccctc | tcaactaaaa | atacaaaaat | tagctgggcg | 56340 |
| tggtggcagg | cgcattgta | cccagctact | agggagggtta | aggcaggaga | attgcttgaa | 56400 |
| tctgggagat | agaggttgca | gtgagccgag | actgagccac | tgccctccag | cctgggtgaca | 56460 |
| gagcaagact | tcatctctct | ctcttttact | ttttttaaag | acttcttctc | aaaaataaaa | 56520 |
| agaaagaaag | aaaatctggc | aatccagtaa | aaactggcca | ctatggcatg | catgtgctat | 56580 |
| gcataaacgt | aaattgatgc | ataaacttaa | ttttagaact | ggaaggaaat | ctggagttct | 56640 |
| ttaggagcca | ggttttacac | atgcagaaac | ctaacagctt | cagtttctgat | tcgataaaat | 56700 |
| ttgactaact | aaacttaaga | taagcatagt | tacgcattag | agtattaact | ctcaaacttt | 56760 |
| taaaaaagaa | ttcttccttt | gcttggtta | tttctttctt | tctttttttt | ttttttgaga | 56820 |
| tagggctctg | ctgtcgtcca | ggccgaagtg | cagtgcgtc | atcatagttc | actgcagcct | 56880 |
| ctacctcccc | ggctcaagta | atcctcctgc | ctcagccttc | tgagtatctg | ggactacagg | 56940 |
| catgagccac | catgcccagc | cttttctttc | cttttctttc | ttttctttct | ctctctgtct | 57000 |
| ctctttcttt | cttttttctc | ccctttcttc | tttttttttg | atggagtctt | gcactatcgc | 57060 |
| caggctggaa | tgcagtgggtg | cgatcttggc | tcactgcaac | ctccgcctcc | gggttcaagc | 57120 |
| aattctcctg | cctcagcctc | ctgagtagct | gagactacag | gtgtgtgcca | ccacgccagc | 57180 |
| taattttttt | atttttctag | agacggggtt | ttaccatggt | ggccaggatg | gtcttgatct | 57240 |
| cctgacctca | ttctccacct | gcctaggcct | ccggaagtgc | tgggattaca | ggcatgagcc | 57300 |
| accgtacctg | gccctttctt | tctttttatc | aagacaacaa | catgtcttta | tagtgctccc | 57360 |
| aaggctaaag | tataccttac | gtctatgtaa | acactcaacc | tgagctttgc | aatggcccat | 57420 |
| gttggcagta | gtgcaacaa | aaacaattat | gaaacccatt | ttcctttgac | aaagagaaat | 57480 |
| aagtggcaag | aattgggtct | ttctcttagt | atgggtctct | gaaaagaacc | agatcagtca | 57540 |
| aaaggggaat | atttttctga | agggataggt | ttggcctagt | ggcttctacc | tcttttagat | 57600 |
| gactgctggt | tctcgtttta | atgttaaata | gacactaata | ggagaaatca | cattaattca | 57660 |
| gtcaacaaac | atttactgag | cacttctctg | agtcaggccc | tctgttaact | tctgggaata | 57720 |
| caatgacaac | tctgacaatc | ccaacccaag | gagccaacaa | gtccgggaat | agagacagac | 57780 |
| aagaaaacag | acaattacaa | ctctaccgtt | agaataaagg | tacattgaga | acttgcaaca | 57840 |
| aatattcctc | atcccttata | ttaattattc | ataacatggt | taccaccaat | agaatagca | 57900 |

| | | | | | | |
|-------------|-------------|-------------|-------------|-------------|-------------|-------|
| ataacaataa | atgcccact | cagacagcaa | tgtccattta | ccctgtgttt | acacagcata | 57960 |
| atacaagcaa | gctgtggaca | gagattctct | tgttttagtcc | tcacaactct | gcaagggtggg | 58020 |
| ttttattact | ctccatttct | agataaagga | tctcacctaa | tattacatgg | gccagtggtc | 58080 |
| ttccagttgg | ggtatgcaca | accctagggg | taggtgagga | ccctgcctgg | ggtcttcagg | 58140 |
| tggggaccat | caacctccat | ttgtactctt | ttctgaacat | tggctctgaga | cagaaagtcc | 58200 |
| ctgcaattaa | ggcattaagc | tggctctttt | tctatttctc | atttcataat | tgcccttctc | 58260 |
| ctgctttacc | aaaatctttc | acccccatc | atatatatat | atccccatac | atattctata | 58320 |
| tatacatacc | ctacatatgc | atgcacacac | atcatatata | tgtatgcata | tatgatatat | 58380 |
| acatatatgc | tatgtaaaca | tatatagtgt | gtatatacat | gtgtgtatgt | gtatatgtgt | 58440 |
| gtatatgtgt | atatatacac | gtgtgtgtgt | acatatatac | atcatatatg | tgtgtctata | 58500 |
| tatgtatata | tgggtgtgtc | tatatatgtg | tatatgtacg | caaatacgta | tatgtgatgt | 58560 |
| atatatatata | gatgtgtgtg | tgtatatata | tgtgtttgca | tgtgtgtgtg | tatatatata | 58620 |
| tagtatatac | atattttttg | agacagcatc | tactctgtc | gccagggctg | aagttcgggtg | 58680 |
| gctgatgaca | gctcactgca | cctcccggct | caagtgatcc | ttccacctca | gcttccctgaa | 58740 |
| tggctgggac | tagaggcgtg | tgtcaccaca | cccagttagt | tattttattt | ttcgtagaga | 58800 |
| tgggtggtctc | actgtattgc | ccaggctggg | ctcgaactcc | tgggctcaag | cgcttttcca | 58860 |
| cctcgacttc | ccaaattgct | gggattacag | gtgtgagcca | ctgcaccggc | ccatccttta | 58920 |
| ttttaatatt | atgcagtgcc | ctgagacata | taaaaaaccc | accttcccaa | gtaaaggaaa | 58980 |
| ttcaagctga | tgcttcgaga | gccttcttta | acaaaggctc | tgaaataccc | tctctcatta | 59040 |
| aaatgatact | ttccaataaa | attttgttta | acaatgattt | acaaaatgat | aaaattttatt | 59100 |
| taattttgatt | gtgtatggat | catggtaaca | ataaaaagac | ttgtaaaaat | aactaaattg | 59160 |
| aaagaatctt | gaacattttag | agccttaaga | ctgtaggaat | tgaagaccac | agaattatta | 59220 |
| atttatatta | atattttttg | tgcagagaca | taatgaatga | tcaacgaaag | gcttttaagc | 59280 |
| gttaaaaaata | tattacacta | gataaaaatta | tttgcgaggaa | tgggatggaa | atacattttc | 59340 |
| aagagagaaa | ggagcaatgt | aaaatgaaga | tgtaaaaacc | ttctgctggg | tgtccttggg | 59400 |
| gttttctttt | aaagaaaagc | ttggcagtgt | ttttcttttt | ttccattgga | tgatgggtgaa | 59460 |
| tatcaaatca | ctttggtgct | aatatttcat | ttaatacatt | aatttttaaaa | ttttctgtag | 59520 |
| aggtgggac | tactatggt | gtccaggctg | gtttcaaact | cctggcctca | agcaatctcc | 59580 |
| ctgcctcagc | ctcccacagt | gctgggatta | cagggtgtgag | ccactgcac | cggccccatt | 59640 |
| taatacattt | aaaagagtgg | tgtacaattt | tttattttaa | atgtcatatt | tacaatatcc | 59700 |
| tagaatgtat | atcttttcaa | ctcattaaac | ctaaacatcc | ttgtaaaaag | tgtgaaaagt | 59760 |
| tatatagttt | ttcaaaattc | gattagcagt | tacataagca | taaatgttta | aagtatgtat | 59820 |
| ggtacagcca | ggcttcagtt | ccctgtctta | aacacaaaga | tccatatcaa | ttccagatac | 59880 |
| tgcaatggtt | tgtgtttttt | cctgcttccc | ccatctccaa | ataaaactaa | gcatcaacat | 59940 |
| gcctcacctc | acataaccct | aagttttcag | cagttggcag | ttacacctgg | aaaccatttt | 60000 |
| tctaaaataa | acaacaactg | tttgcttacg | gatcaaaatg | caaaggacca | taacattttag | 60060 |
| cctcaccttc | ctactacaga | tgcagtttaa | aagtgccatg | gtatagctaa | attatgaaga | 60120 |
| aagatatgaa | tataactgca | aaagtggaa | gagatttggg | ataattcttg | cccattttgt | 60180 |
| taggccaaat | gcatctttgt | gcaaattaga | aaaagggtgt | cttcacccct | tactcctat | 60240 |
| ccttttgggg | gtgggggggc | agtggctaaa | gtacagacta | ggtttcagct | accacatcct | 60300 |
| ccttcagttt | gctgcccccg | gcgtgacaga | aacatgtgca | aacagccctg | tgcccttgtc | 60360 |
| ttatgttcca | gccagccaag | aaaaatagtt | gtaaaagagc | agctgctggt | tggggtaatg | 60420 |
| accttggaac | ctcccccaat | tgttccaagc | ctgtttttgt | attcattttt | cccacattta | 60480 |
| tgttctctgga | tggaagcttc | catatctgct | cttgccctta | tttgaaattc | cccagatttc | 60540 |
| cttctctggt | cctggccttt | ggtttttcat | gtggctcctg | atcccacacg | ctcctgaat | 60600 |
| ttggattctc | ctgtcatttc | aggtgctagg | tttcccacta | cagcctcttg | ggcctcacct | 60660 |
| ccaatacctc | tttcccatca | gaacagcccg | gaccttcccc | tatggtagag | cagagacaga | 60720 |
| atttaaatga | attctcaaga | agtgccttga | ctcatatcta | gcaaaattac | atggcattta | 60780 |
| acctttgaca | caaaaaatgc | agcttctagg | aatctatcta | aagatacact | gtggcaaata | 60840 |
| tacaaaaaga | agcattattt | atcaagcact | atttccta | aaaataatc | ttaggtcagg | 60900 |
| cgcaatggct | caggcctgta | atcccagcac | cctgggaggc | tgaggaaggc | agatggcttg | 60960 |
| agctctggag | ttcaggacca | gcgtgggtaa | catgacaaaa | ccccatctct | aacaaaaata | 61020 |
| caaaaattag | ccgggcatgg | tggcatgcac | ctgtagtccc | agctactcga | gaggctgagg | 61080 |
| tgggaggatc | gcttgagcct | gggaggcaca | ggttgacgtg | agccaagatc | gcaccactgc | 61140 |
| actccagcct | gggtgacaga | gtgagaccct | gtcaaagaaa | gagagagaga | gagagaaagg | 61200 |

| | | | | | | |
|-------------|-------------|-------------|-------------|-------------|-------------|-------|
| aaagaaagga | agaaaggaag | aaagagaaaag | gaaagagaaa | gaaagagaaa | aagaaagaaa | 61260 |
| gaaggaaaaga | aagaaagaaa | aaagaaagaa | aaagaaagag | aaaggagaaa | aagaattcctt | 61320 |
| actaataaat | gcaggagaaa | tgatagaatt | gaaatatcac | catttttcaat | tcctaatagaa | 61380 |
| ataacgtatc | taggcaatga | ccatcaatag | ctagatgcta | aaatcatctg | atcaaact | 61440 |
| gatgggaact | tcgtaacaga | tggatcaggc | taacaacatc | tgaaaccact | aactgggtttt | 61500 |
| gatgtcataa | aaagaaaaac | aaccagatat | tttctgtctc | ctgatgagtt | gcaattggag | 61560 |
| ctacatatca | cctgtaaagt | cttctggcca | aaaaattaag | cccagccgga | ccttattaaa | 61620 |
| cctttaaatc | taacaattag | ttttgaagct | tttacagatt | aaatgaagtc | tgagatttgc | 61680 |
| ttcaaaatga | accagtgggtg | gggaggaagt | gggtgaggtg | taggtgaaac | aagattggcc | 61740 |
| acgtcgataa | ttgctggagc | tgggcgatga | aagcacaggt | atztatcaca | ccatctctct | 61800 |
| acttttgtgt | gtttttttgt | ttgttttttg | ttttgggtttt | aaggagcaga | gagtctaata | 61860 |
| ggcaagaaaag | aaaagagaag | gctgaaggaa | gacgctcccc | cgtacagaga | cagagggagg | 61920 |
| gggctccaaa | gccgaaagag | gaggtcctct | tgtgtatggt | ttaaaatact | cccagataaa | 61980 |
| atatttttgg | aagagtactt | ggttggattc | aacagctttt | ttttaattta | aaaaaatcac | 62040 |
| ctcaattttt | ttgcttgctc | taacgtgcca | tagaaattcc | tgagggttta | cttggtgctt | 62100 |
| tacaatgaac | tgtgtaaaca | caagctggaa | gagatcagct | atgctgctgga | aggggttggtt | 62160 |
| aaatattgag | actgccttgc | tgagggaagc | cttttaataga | atctcagtaa | ttttgcaaga | 62220 |
| gaaaagataa | caatgaacac | tacattaac | atcattcttt | tgacttttgc | taaataatgtg | 62280 |
| tatgtaaatt | actgtctgac | tgttactgga | tatatacagc | atatacatat | gcactttttt | 62340 |
| tactgttttt | tttttttttt | tttttttttt | tttttttaca | gagcttgctc | tgtcacctag | 62400 |
| gctggagggc | agtggcgcag | tctcagctca | ctgcaatctc | cgctcccag | gttcaagcga | 62460 |
| ttctcctgtc | tcagctcca | aagtagctgg | gactacaggg | gcctgccacc | gctcctggct | 62520 |
| aatttttcta | tttttagtag | agacaggggt | tcactatggt | gtccaggctg | gtctcgaact | 62580 |
| cctgacctcg | tgatccatct | gcctcgccct | cccaaagtgc | tgggattaca | ggcataagcc | 62640 |
| accgcgcccg | gcccatgtat | actattttata | cattttttagt | atcattttgt | ctttacattt | 62700 |
| tacataattt | cagatacatt | ttctcatat | caaataattc | agcatttttt | agtactaaca | 62760 |
| tcatagtctg | taagccattc | aaaaaatgta | tttcacaaaa | taggctatct | catcctttga | 62820 |
| gctattgaga | tgaattaatt | tatactctc | ctaagatccc | tctcgctact | aagattcttt | 62880 |
| tattttatga | caaaaccata | gttctagaag | cttgtttctc | ccacctgaaa | agactggatt | 62940 |
| tgggacatga | tctgttagaa | cttcggaggt | aagcctgggtg | aatcagatca | taggggggtct | 63000 |
| ggaggggtgaa | aaaaaaggggt | ttggtgctca | tggatggggc | tagtattggg | gtgtagggga | 63060 |
| gattaggtca | aagcaagagg | attcaaagga | gaaatgaatt | cctttagatt | ggggaagata | 63120 |
| atcggaagag | gtaaaagaca | ccgtccatga | cacttctctg | ggaagcagat | gtatgtataa | 63180 |
| ggatgtgagt | attgtgggtt | tgtaaagaat | gcattcctga | agatggttga | taattttaaaa | 63240 |
| cctacatatt | ttgattaatt | ttctcatgag | aatagcaggg | tatgtgttct | cggcgctcac | 63300 |
| aaatgtataa | tccattgtgg | caaatttttg | ctttcacata | ttttttttta | tcattattgt | 63360 |
| cacaggttct | gtgacggagt | tctggtttct | aaattcacag | cataccaagg | cagttcttta | 63420 |
| aagttcttga | tactctttta | tcatatctaa | cttgatttcc | aaaattattg | agttggagca | 63480 |
| cattttccca | gcacttagca | ccgtatttc | atggatgggt | ggagaggggg | tccaaaaatt | 63540 |
| ttacaattat | gttaacaaaa | gtaaacacagc | aacaaaaaaa | taagcaaaat | cactgccaga | 63600 |
| gtattcctta | gcttgaaaca | atacggttca | catcgataga | atatggcatc | tatttctggt | 63660 |
| taatcagtta | accctgctaa | gtagcaagag | cttacaattc | atgtctaaaa | tcattgattt | 63720 |
| tttactagtt | ttttaaaaaa | tgtgggctct | atatatataa | tttaacattt | tgcttgtaag | 63780 |
| acttaatttt | gcctgggtat | gggtggctcat | gcctgtaatc | ctagcacttc | aggaggttga | 63840 |
| ggcaggagga | ctgcttgaac | ccaggagttc | aagaccagcc | tgggcaacac | agtgggaccc | 63900 |
| catcactacc | aaaaaaaaaa | aaaattagtc | aggcatgggtg | gtgtgcactt | gtagtcccag | 63960 |
| ctacttggga | ggctgaggtg | ggaggatcac | ttgagcccag | gaggtcactg | ctgcagttag | 64020 |
| ccattattgt | accacaacac | tccagcctgg | gtaatagagt | gagactctgt | ctcaaaaaaa | 64080 |
| aaaaaagact | atttctaaat | gtgtggctat | attataccat | ataaatgtgg | cttcttgggc | 64140 |
| aaggaaagag | gacaatatag | atgaaaaaga | aattgatcct | accagaagtg | atccttttat | 64200 |
| ctgcataact | ctcaggcagt | tgtggcaaat | aattggcaat | atctattggt | ctgaaactgg | 64260 |
| ttttcgcaac | ttttattggg | aacaccatcc | cctctcctgc | atgatcagtt | tctcctctcc | 64320 |
| acggatcatt | cacatgagta | aagtcagtag | cgtgctggta | aatgtttaag | atcttgttct | 64380 |
| ttgggggaaa | aagttcctaa | gttctagcag | ttgccctgga | taacttcaag | gtatcaacat | 64440 |
| ggaagttatg | tacaaaaatg | gctgtcacaa | gccagtatga | gctaacaacca | acatactacc | 64500 |

| | | | | | | |
|------------|-------------|-------------|-------------|-------------|-------------|-------|
| cagtgttctt | caaacttcag | ctcacagccc | attagtgggg | cttgcaaaca | ttttagtgga | 64560 |
| ctataagcag | cattttttta | aaatgaaaaa | gtagattggt | ttacacataa | caggagtatt | 64620 |
| gttttgtaca | atTTTTTTTT | TTTTTTTTTT | TTTTTAGACA | cagtttctact | ctgttgccca | 64680 |
| ggctggagta | cagtgggtaca | atctcagctc | actgcaacct | cggccttctg | ggttcaagcg | 64740 |
| attctcatgc | ctcagcctcc | cgagtagctg | aaattacagg | catgcgccac | aaggcccagc | 64800 |
| taattattgt | atTTTTtagta | gaaacagggt | ttcaccatat | tggccagggt | ggtctcaaac | 64860 |
| tcctgacctc | aagtgatcca | cctgcctcgg | cttcccaaag | tgctgggatt | acaggagtga | 64920 |
| gccaacgtgc | ctgggtcaaaa | TTTTTgtttt | cgtaattttta | agtatgtgtg | tagtaagtct | 64980 |
| caatggaaat | gtaattctta | tggcagggtca | cttgaaaaaa | aagaagtcta | aaagtcacca | 65040 |
| atgtagtata | ttctctttta | aaaaaaaaaa | aaacaacagg | agaaaacctg | aatctgccct | 65100 |
| ttgctccact | ccttcctcag | ctataatgct | gcttctccat | tcctcctcac | agcaaacctt | 65160 |
| tctgaaatct | ttatagtcac | ggtttccacc | agttcttcac | ctcccatctc | tcaacacact | 65220 |
| tcagagtcag | agtcagcaat | gacatccatg | ttcctaagcc | cattgcttac | ttccgtcctc | 65280 |
| cttggcctct | cagcacactt | ggcacacagg | ctgtttctct | ttctttggca | tctgtgacac | 65340 |
| cactctcagc | aaattcccct | ggttgtccct | tctcagtcct | atTTattggc | gttgtcttat | 65400 |
| ctccccagg | ctgtccgagg | tgattttctc | ccactactct | cctaggtggg | gccatccaat | 65460 |
| ctcatgatgt | catatcattc | ttccctcatg | cttcagccat | actggttggt | ggcctttggt | 65520 |
| tcctgaacac | atTTaatgca | ttctcaagac | cctcaggga | tttgagcag | ctgctcgcta | 65580 |
| aggctggaat | gctcttcccc | accatcttca | tatggctggt | tcctttcttt | cactcaccag | 65640 |
| cagcttaaac | tttgactcct | ctgagagact | ttccttgcta | cccaactaag | gttgccactc | 65700 |
| agggtgctcc | aattttaatct | tctctaaaac | acatcactgt | atgtgtcctc | aactagagta | 65760 |
| taagcttctc | cgaaacaaga | acaatcaaaa | ctccttgccc | tcattggagt | tatagtctta | 65820 |
| tgatgggtga | agtaacataa | aataaaaaag | caccttatat | agtatatagg | catgacaaat | 65880 |
| gttagccaga | aataaagcaa | ggaagagtgt | ctagggagtg | tgtatgagtg | tgttttggga | 65940 |
| gagtgtttgc | aatttttaaat | attgggtggg | aggaagggcc | ccactgagaa | ctgacatttg | 66000 |
| agtagacttg | aaaagggaaa | aggaaatatt | gagtaaagat | tttaggatgg | gagtgtgaca | 66060 |
| ggcctgctag | gagaatagca | aagtcgctgt | ggctgctgca | gaaaaagtga | gaaggaaagt | 66120 |
| agtaggagat | gaaatcacag | tgtgtgagga | ttcgggcaga | tcaggaaagt | ctcgtgtaag | 66180 |
| aactggatct | ttactcaaag | aatgagcaaa | aattagtaga | cggttggccg | gatgcagtgg | 66240 |
| ctcacacctg | caatcccagg | ttacaggagg | ccgaggcggg | cggatcactt | gaggtcagga | 66300 |
| gttcaagact | agcctgggca | acatggtgaa | acctcatctc | tactaaaaat | acaaaactta | 66360 |
| gctgggcatg | gtggcgcgca | cctgtagtcc | cagctactca | ggaggctgag | gcacatgaat | 66420 |
| cacttgaaca | cggtaggcag | aggctgcagt | gagctgagaa | tgtaacactg | tactccactc | 66480 |
| caacctgggc | aacagagtga | gactgcctca | aaaaaaaaaa | aaaagtaggt | tttagtaagg | 66540 |
| gattaacatg | atctgaatta | tgTTTTgtca | tgacttctct | ggctgttggt | ttgagactac | 66600 |
| attgcagagg | ggcaagggca | aatataggga | gaccgattag | gatactgcag | taataatgta | 66660 |
| agagatgtgg | gactctatct | agaaggggcc | atgaggtcct | ttgcatgcta | gtattcttta | 66720 |
| ctgctgtgcc | tggccatgat | aggcattcag | tgaatatttg | cttattttaaa | ataacacact | 66780 |
| gggctaattg | aacaacagtg | ccaaatgagg | gagatatttc | taggaataag | ttcttaggat | 66840 |
| ttatgaacat | tttaatccag | atTTtctttg | ttactctg | tctctggccc | tttctactcag | 66900 |
| ccccgtttgc | accttaatat | gacttaca | agaaacacag | catttatgtg | tacttatttc | 66960 |
| aacttacttt | agctttgtaa | agaagtacaa | ggttgactca | gggccagct | tgggtgtctca | 67020 |
| tgctgtaat | ttcagcattg | tgggaggcca | aggcaggaag | atattgtgag | cccaggaggt | 67080 |
| tgagaccagc | cygggcaaca | cagtggaccc | tgtctctaca | aaaaaaaaat | tttaaattag | 67140 |
| ctgggcatag | tgggtgtcgt | ctatagtccc | agctactcct | ggggctgagg | tgggaggatc | 67200 |
| acttgaggga | aacctgtct | caaagtggcg | gggctggggg | gagactcagg | cagaattgtg | 67260 |
| aagatattca | attgctcctg | actttatcaa | taatctaaca | tttcaacctc | acattgatata | 67320 |
| ctattttatg | caaagcatta | cactatgcac | tggagactgt | ataagacaag | ttccttttct | 67380 |
| caaactacag | tcgagttgga | tagataaaac | acacaacaca | taccaaaga | cagctataaa | 67440 |
| tccaaggcag | tgtatgtcaa | gggtaaattc | acctattcag | attggatctt | gagaagtgca | 67500 |
| tcaggcttgg | aaaatgggta | aggaggagag | aaaagcaaca | gtgaatcaga | acatgagttc | 67560 |
| ccagttatgg | gacttgtaat | gaattcctca | attaaaacaa | aaaataatga | aaacaaaagc | 67620 |
| caggaggagg | aaagcccacg | ttaatgacac | taaaatatata | ctttccaaac | aaatgtggat | 67680 |
| aaaagccaag | tagagaagat | gagaactttg | aggctcctaa | cacaaaataa | acagtaagca | 67740 |
| gccagccatt | ccaagtggct | gacatgactt | tgtttaactt | tatttgtatt | tctggctggt | 67800 |

| | | | | | | |
|-------------|-------------|-------------|------------|-------------|-------------|-------|
| gtgtttacag | ccaataggtc | aaactatcag | tcagtgtagg | gccctgagaa | gtcgggtatt | 67860 |
| taagagcatc | taataggcac | agaattgtgc | tccatactgc | ttaaactgtt | ccctaagtgt | 67920 |
| ccaatttgga | gaaaacaccc | acacgcagga | taaccggcga | gtgacgcgga | gtggctgcga | 67980 |
| gtccaagtta | tcactaacgg | atggggagct | tgggctgggc | acagtccagc | gtactgaacc | 68040 |
| cttccccac | cgtttcacct | gcatacagag | gtgtgtactg | tcaaaaagca | gcgcctccaa | 68100 |
| gtctcttctg | gcactgtctg | gacttggatc | cgaggcagac | gaggaagctg | agaaaaccct | 68160 |
| ggcgttgacc | ccgtggacct | gggcgccccg | ggaaggccag | cgcttgggtcc | aggcaggcgg | 68220 |
| ggcctgtgcg | gtgaccaccc | tggctcctgaa | aagtcccagc | cccagcgcgc | ctccctccta | 68280 |
| gacctggagg | cctggaacag | ccagggtggac | gtcggcccac | ctttcttttc | tttccttccc | 68340 |
| attttcctac | cacctcccac | cccactccgc | cttcggggca | aaggcagcca | gatccaccca | 68400 |
| ggacacattc | tttgtcctta | tccctctgtg | ctcgtcccac | agcaagccag | tcgcggtcca | 68460 |
| aggctccaga | ggctgtgcag | gaggccgagc | tgggtggcga | tcagcggcgg | gtccctgtcc | 68520 |
| aaaayccagc | agagccgcca | gggacgcccc | agacacagaa | ggcggggcgc | ggggaggggtg | 68580 |
| gggagaccac | agcagtgagg | cgcgcgagcc | gggaagtga | cgaggactga | ctcctgtcgc | 68640 |
| ttcccgtagc | cgcccacgga | cgccagagcc | gggaaccctg | acggcactta | gctgctgaca | 68700 |
| aacaacctgc | tccgtggagc | gcctgaaaca | ccagtctttg | ggtgagtcgc | gcgacccccg | 68760 |
| gcctcgggtg | gcggggcagt | cgctagaggc | gtggctgctc | tgaggggtctc | gccagtggag | 68820 |
| gatggcattc | ggatgtcacg | gctcctaaat | caccatttga | tgggtgggac | agtgtccagt | 68880 |
| ccaccccgac | ccgcgggtcc | tcaccgcggc | agagccgggg | ctgggtggcg | gggacgctgc | 68940 |
| ctctgcaggc | gaggcgctcc | ggggcataag | ggattatcag | gagtcgcggc | ctttcttgga | 69000 |
| catccctggc | tggggtcagg | ctgtttgccc | tggggtgtct | cctcgtgca | aaccaccccc | 69060 |
| acctgggctg | ctttctcacc | tgttccctcc | tagcctgagg | ccgagcgcca | cctccaagtg | 69120 |
| gaggaatctg | gggaagtttc | cttcccggaa | tttgtagtga | cagtggagtg | acctccattg | 69180 |
| cgttccctgc | ctctaacacg | ctcttttagga | tgcgagtcga | tttgactgca | gtgttaaaca | 69240 |
| ttgcaaagcg | caagtcatgt | gacttccttt | gaccgtacgt | gaaacttaag | tgatggctgc | 69300 |
| ttgtgatgca | tacgaagtgt | tcattgctggc | gggacctgtc | cctgggggata | cttcgggggt | 69360 |
| tgcgtgattt | aatgcaagca | gatggcttaa | attgggtcac | tggcttggtta | ttatacatgt | 69420 |
| gtatggcaac | tcggcatcca | ttctttttgc | tcttgttctt | acttccctgaa | ttgagtcacg | 69480 |
| gagccagagt | tttgagggtt | tgactaacga | attaagttaa | tgacatgggg | ctatattttag | 69540 |
| gtggtaaacc | aagagggata | cagttttttt | tcttaataaa | gaaaaagtga | tagattttgat | 69600 |
| cggtgtgtat | tgttggtgtg | cagtataatg | acagaattgc | tggaaagtaa | atacaggaag | 69660 |
| ctctgggttc | atctcccttt | tagttctgct | taaagtcgag | tttttctctg | agctattaaa | 69720 |
| tgtagtgtag | tgtccatgag | tgtttttatc | ttaaaaaatg | tggctgatgc | tttccaacac | 69780 |
| tccccgtccc | tgtgattatt | atttttttta | gcaacagaga | aaactgtatc | ttaatagtat | 69840 |
| taaaagtatt | ggattttttc | ctactttgat | ttgtttaaat | tggaggagga | agagcaattc | 69900 |
| tttctattca | caataataat | agctaacata | gcgcttactc | tttcgctgtt | ttattaactc | 69960 |
| aatcctcaga | acaaaccaat | gatgtgaata | ctgtaattct | cattttatgg | aaatgaaaat | 70020 |
| ttaaatgaat | acctctgata | attgtacggg | actgtttgat | tagtattttac | cattaattaa | 70080 |
| ttaaattttt | tttttttttg | agatggagtc | tcgttctggt | gcccaggctg | gagtgcagtg | 70140 |
| gcacaatctc | ggctcacttc | aacctccgct | tcccaggctc | aagcaattgt | cctgtctcag | 70200 |
| cctcctgagt | agctgggact | acaggtgcat | gcgactacgt | ctggctaatt | tttgattttt | 70260 |
| tagtagggat | gggattttcac | catattggtc | aggctgggtc | ccaactcctg | aacctcaggt | 70320 |
| gatccacccg | ccttggcctc | ccaaagtgtc | gggattacag | gtgtgagcca | ccatgcctgg | 70380 |
| cctatttttag | tattttttaat | aataaattcc | atgttagaaa | ttttctactg | atgtattttt | 70440 |
| taagtcaata | tttcctacac | tcacaatcca | aaattattta | gtatatgagc | acactggtaa | 70500 |
| gaatgggagg | cagatcgttg | attgtaataa | tattctatta | tttggtaaat | atcagtaaca | 70560 |
| taatatataa | tttaaatttt | aaaataggat | atgaagaaaa | atgctacatg | cttacttttc | 70620 |
| ttttcctcta | tttttacttt | acacagggcc | agtgcctcag | tttcaatcca | ggtaaccttt | 70680 |
| aatgaaact | tgccataaat | cttaggtcat | acacagaaga | gactccaatc | gacaagaagc | 70740 |
| tggaaaagaa | tgatgttgct | cttaacaac | ctacagaata | tcattctataa | cccggtaact | 70800 |
| gattttctata | agataacttt | ttacctatgc | caggacagat | ccaatagaat | attaattatc | 70860 |
| cattggggaga | cagggcaaga | ataaaagcca | gtgaacatat | ttaaagcacc | tactatgtaa | 70920 |
| tagagatggg | gggtgggtgct | gattacgaaa | cagctcttgt | cctctagtgg | aggaagaagt | 70980 |
| cacaatgata | atatgacgtg | atgaaacagt | gttatgaaca | gggaacgtct | gggtagagtg | 71040 |
| gagggaaatgc | caacttttgg | tgatgggagg | aggctcagct | aatcataaat | tgtagttttt | 71100 |

| | | | | | | |
|-------------|-------------|-------------|-------------|-------------|-------------|-------|
| aaaggaaaat | ggattttctta | ctctacaagt | ttttcatttt | cttttttaat | tagagctgtc | 71160 |
| catgagaagt | taatgtctcg | atctttccct | cagcctttca | aatactgctt | ggcccttgag | 71220 |
| cagggaaaat | gtcaaaagcc | aatggggaga | tggagagtgt | gaagtagtaa | gggtctcgtg | 71280 |
| cagttcaggc | aggtcctaga | atccctgaat | gactgttaatt | gctggaaatt | gccctgtaat | 71340 |
| cctgagcagt | aaagagcttg | tttttagttt | atgtggtggt | gagaatcttt | aggaatgtct | 71400 |
| agtttccacg | tatctgaagc | tgaatcctga | atcgaggctc | gaaaaaggac | agccactttt | 71460 |
| ttagtaaacc | gcctagaaga | ttcttgggca | aaaggaaggg | tgagaatcct | taaaatgagg | 71520 |
| ccctaaacca | gttttggttag | tgtgtgtggg | ttcaagtttt | tgtcattttac | tttatagctg | 71580 |
| tatttccttt | ttccctaagt | tttaatgtca | ttgtgtaaga | atgagggtatc | gctgctgtat | 71640 |
| caagcaaagt | cagtttttagg | agaaatagcc | tttcagtggg | agtaagttta | aaaaagatga | 71700 |
| cttcctgaag | cggaagcttg | tgagacattt | aagatgactt | tgcgcatggt | agagttaaaa | 71760 |
| acatcccaag | gttgtaaact | gatttctctgc | aaagatctta | acaacaacaa | caacaacaac | 71820 |
| aaactaggct | gcctgccacg | ggtgtctgaa | gtatcatctt | ggctcaagct | gggagaatgg | 71880 |
| ataaagggtta | cactgttcat | ttctgccctt | cacacagaaa | agaagataat | tttataggta | 71940 |
| aaattcgtgc | atatcttgat | tctagcatat | tgtgtattcc | tgtagtttct | ggggtcagta | 72000 |
| ctctcaacta | ttgaggtgga | acaaaaataa | gtagacttca | tttcttgagg | aaggggatct | 72060 |
| ggagaagtag | ttctgcgcta | gagcagaaaa | tgccttcagt | cttgtggcat | gggctggatg | 72120 |
| ctgttctgag | gataatgcat | ttccaaggga | gatatttttg | gcaaatagct | tttttttctt | 72180 |
| tcttttcaaa | attctctggt | ttattatcag | ttctcacaaa | agagtcggaa | aggtttagagg | 72240 |
| tagactgaac | tgaatggcaa | aaacattttg | cgtctctctt | acgtttcact | gctgtaaaaat | 72300 |
| atttatagta | taaagggcct | gtattgcact | gaatttctct | catttgtagc | tagttgccct | 72360 |
| ttcaatgttc | caaaaaaaag | gctgtaaata | acttattttta | tttattcaat | taattttttt | 72420 |
| ttttaaat | tttgagatat | agtttccctc | tggtcaccca | ggctggagtg | aatgatgca | 72480 |
| atctcggctt | actgcaattt | ctgcctcccg | ggttcaagca | attctagtgc | ctcagcctcc | 72540 |
| tgagttagctg | ggactgcagg | cacgtgctac | catgcccggc | taatttttgt | gttttttagta | 72600 |
| gatatggggt | ttcacagtgt | tggccagcct | agtctcaaac | tcctgacctc | aggatgatgtg | 72660 |
| cccaccttga | cctccaaaag | tgtctgggatt | acaggcgtga | ggcaccatgc | ctggccaact | 72720 |
| tagttatttta | aagataatca | attagtatat | tttataagct | agacttagga | aaactgtttt | 72780 |
| cagctgggca | tgggtggctca | cacctgtaat | cccagcactt | tgggaggccg | aggcagggtg | 72840 |
| atcacgaggt | caggagttca | agaccagcct | ggccaagatg | gcgaaactcc | gtctctactt | 72900 |
| aaaaatacaa | aacttagcca | ggcgtgatgg | cagcctcctg | taatcccagc | tactcgggag | 72960 |
| gctgaggcaa | gagaatcact | tgaacctggg | aggcggagggt | tgcagtgagc | cgagatgggtg | 73020 |
| ccactgcact | ccagcctggg | tgacagagcg | agactccatc | tcaaaaaaaaa | aaaaaccccc | 73080 |
| cccacacaca | aaacctgttt | tcttgaatca | tgggttgtttt | gttactgata | ggttcaataa | 73140 |
| gtaaatatat | ttattgtctg | ttgtattctt | tattaggcat | tataaacaca | ccgccacttt | 73200 |
| tttaattttta | tttcattaat | gtttccaatt | tttttttttt | tttttttttt | tttaagacag | 73260 |
| aggctcgctc | tgtcatccag | gctggagtgg | agtgggtgcag | tcttacccca | ctgcaacctc | 73320 |
| cacctcctgg | gctcagcctt | gtaaatagct | gggactacag | gcatgcacca | ccatgcctgg | 73380 |
| ctaattttttg | tatttttttt | ggtaaagaca | gagttttgct | atgtttctca | gtctgggtcaa | 73440 |
| gcactcctcc | cgctcggg | tcccaaagtg | ttgggattac | aggcatgagc | cacctgcctt | 73500 |
| ggcctattttc | taatatattt | gtccacattg | gtgttagacc | aactgtccac | attaagtttt | 73560 |
| cttggaagag | atgaagtaaa | tattgcaact | ggcctatgta | tttttttccc | tatttagtat | 73620 |
| atttcctttga | ctagttcaac | tgatagaatt | ccaagactta | aaaaagtcag | gctctaaggc | 73680 |
| tgggtccaga | ggctcatgcc | tgtaattcca | gcactgtggg | aggccaaggc | tagtggatca | 73740 |
| cttgagccca | ggagttcaag | accagcttga | gcaacatagt | gagaccttgt | ctctctataa | 73800 |
| aaatacaaaa | attaactggg | gattgtggcg | catgtctgta | gtcccagcta | tgaggaagag | 73860 |
| tgaggtggga | ggattgcttg | agcccaggag | gttgaggctg | cagtgagctg | tgagtttgac | 73920 |
| actgtgcttc | attctgggtg | acagagcaag | aaccatgttc | aaaaataaaa | ataaaaagtc | 73980 |
| agagtccggg | tgtctcgggt | catgcctgta | atcccagcac | tttggaagc | cgaggcgaga | 74040 |
| ggatcacttg | aggtcaggag | ttcgagacca | gcctgactaa | cacagtgaat | ccccgtctct | 74100 |
| actaaaaata | caaaaattag | ccgggcatgg | tggcggtggc | ctgtaatccc | agctacatgg | 74160 |
| gaggttgagg | caggagaatc | acttgaaccc | gggaggtgga | ggttgtaatg | agccaagatt | 74220 |
| gcacaactgc | actgcactct | gggcgacaga | gtgatacttc | atctcaaaaa | aaaaaaaaaga | 74280 |
| aaaaaaaaagt | taggcttctt | tttctgtttt | ttttttcttt | tttcttctct | tttttttttt | 74340 |
| ttttttaaga | gatggaggct | tgtctctattg | cccatgctgg | agtgcagtgg | tgcaatctcg | 74400 |

| | | | | | | |
|-------------|-------------|-------------|------------|-------------|-------------|-------|
| gctcactgcc | acctttgcct | cctgggttct | agcaattctc | ctgcctcagc | ctccccagta | 74460 |
| gctgggacta | caggcgcaca | ccgccacgcc | ccgctaattg | ttcttttgta | ttttagtaga | 74520 |
| gacgggggtt | caccatgttg | gccagcctgg | tctcgaactc | ctgagctcag | gcaatccgcc | 74580 |
| cgccctcgcc | tcccaaagtg | ctaggattat | aggcgtgaac | caccgtggct | ggccacttac | 74640 |
| ttttctttct | attgaatttg | aatgaataat | ttggaagaca | gtatctttac | ttcataccag | 74700 |
| gaatgctgcc | agtgaatttt | cttgtttggc | agttcattat | ctacctatat | atttaatttt | 74760 |
| gctattgttt | atagagttct | taagatatga | ttaaatgcta | gctggttaag | aaatcattta | 74820 |
| gaaatgaaac | agaattgggt | gttactccaa | gttaataagt | tgcttgtaaa | cataaatcct | 74880 |
| acctggtacc | cagttttctt | aggaaccttg | cttccatggt | tatccttttc | tgcttagtat | 74940 |
| tctaagtact | ccttttttac | cttacaattt | agtcttaaaa | cacaacacag | tcaagtcttt | 75000 |
| cttttgtaac | ctgtgaggtg | ccttctagcc | tttgtgctgt | ttttcttctt | tttttgctgc | 75060 |
| ctgccttcct | gactgagagt | ggatttcctc | actaaggctc | tgccctctga | tttttcactc | 75120 |
| tcttttcttt | tttgggttta | ctagtgaat | tttgtcttta | atgtctcttt | cttttatgtc | 75180 |
| tttaccgatc | actcataaat | ttttttttcc | atatgtatcc | agttccaacc | tttcacctaa | 75240 |
| tgtgaacccc | caactctcag | ttgctcagcc | agcccttcaa | gactaggagt | tcaaaaccaa | 75300 |
| acttgcatct | tccttcccaa | accagctttc | ctcttgagct | tttctgcagc | aggatccttc | 75360 |
| tgctgtttaa | cttttgccct | ctcccttggt | tcctagcacc | caatagttgg | aagatagtct | 75420 |
| gtcttcaaaa | ttttaacta | catttatgtc | caaaccagtg | gcttttccct | ttaaaaaat | 75480 |
| ttaaagataa | tatgtgcaaa | tcattttttt | aaaattcaaa | cagtatttaa | gagtttcagt | 75540 |
| gaaacatgca | ttttccttct | accctgggtac | ttagttttac | tccccaaggg | caatcacttt | 75600 |
| ttactgggtt | ttagaaatat | atccttccctg | agatacttat | gaatatccaa | aagtgtgtgt | 75660 |
| gttggtgata | tcacctttta | tatatcctgt | ctctttacgt | gcatgcattt | taccgtataa | 75720 |
| actgttttct | accctgcttt | ttctatttga | cctatttttg | aaatgtcatt | ttatttagaa | 75780 |
| cttcctcatt | tatttttaaca | gctgcataat | tagcagtaaa | acttatgtaa | gcagtccttc | 75840 |
| gtgaagggct | gtgtcttttt | gcgattatat | ccggtgctat | agtgtacatc | cttggtgtgtg | 75900 |
| catcttggtg | tgctgtgtct | acgtatttct | gtaggataaa | tctgtaaaag | tggaatcact | 75960 |
| aggtcagagg | gtatgggtcca | ttttcttttac | ttattttatt | tattttattt | ttcattttatt | 76020 |
| tttgagacag | agtcttgctc | tgctgcccag | gctggagtgc | agtggcatga | tcttggttta | 76080 |
| ctgcaagctc | cgctcccg | gttcacacca | ttctcctgcc | tcagcctccg | gagtagctgg | 76140 |
| gactacaggc | gcccgcacc | cacgcctggc | taattttttt | gtatttttag | tagagacggg | 76200 |
| gtttcaccat | gttagccagg | atggtctcga | tctcctgacc | tcgtgatcca | cccatctcag | 76260 |
| cctcccaaag | tgctgggatt | acaggtgtga | gccaccgcgc | ccggcccat | tttattatct | 76320 |
| ttatttgctt | ggatccttct | tagcttcttc | aatgttaaag | atattgacag | ttttcctctt | 76380 |
| actgaaattt | ataaatccat | tgactccctt | gatattattg | ccctggcctg | actgattctt | 76440 |
| ctctctcctt | tctcttctca | ccccatggtg | aggccccaa | ggtcacaccc | agttttgatg | 76500 |
| actcaccagc | atagagttgt | acttggtgct | atgatttatt | gcggtgaaag | gatatagagc | 76560 |
| aaaattgcaa | acggaaaggc | acctgggggtg | aattccaggg | gaaatccagt | gcaagttcca | 76620 |
| aggtcgcctc | ccagtggagt | cacataggat | gtgcttacat | cctccagcaa | ggagtgtgta | 76680 |
| caacacttgt | gaaatgtgga | ctgccaggga | agctcatcag | agcctcagtg | cctagggttt | 76740 |
| ttactggagg | ctggtcacat | aagcaccctc | acacatatca | aaaaattctg | gtccccaga | 76800 |
| aggaaagcag | gtgttttagca | taaccatat | atttgcatga | acagttcagg | tacaggaaat | 76860 |
| ccccgttacc | agtttaggtg | gtgggtgccc | ttctcaaate | ccaagttccc | agacaccagc | 76920 |
| caggggcctg | cctcgtaagg | aggcctttcc | aggacagcag | tcaggcctgc | caatgttaat | 76980 |
| tcttttctgc | atacctccta | attttagaaa | ccaccgagcc | tttgctgctt | gacctgtcct | 77040 |
| gcttttctgat | ttctttatct | actttgatat | ctttacaaat | gatctttacc | ctgactttta | 77100 |
| aatgtgtgct | ctggccattc | acctagcgtg | tggttctgag | tctccaagtc | ttagcagatt | 77160 |
| tgctctcaga | tgctctgcca | acgcttcaca | ccaagtatta | caaactaaac | tcgtcatctt | 77220 |
| cctcctgaaa | cctgtctccc | aggccaggcg | cggtggctca | cacttgtaat | cccagtactt | 77280 |
| tgggaggccg | agggtgggtg | atcacctgag | gtcaggagtt | cgagaccagc | ctggccaact | 77340 |
| tggtaaaacc | ccatctctac | gaaaaataca | aaaaaattag | ccaggcgtgg | tggcaggcac | 77400 |
| ctgtaatccc | agctattcag | gaggctgagg | caggagaatc | gcttgaaccc | gggaggcgga | 77460 |
| gattgcagta | agccgagatc | acgccattgc | actccagcct | gggcaacaaa | agtgaaactc | 77520 |
| catctcaaga | aaaacaaaaa | acaaaaaaca | aaaaacctgt | tttctcccca | gctttgtcat | 77580 |
| gtatttagtg | gccttatgta | gacagtttcc | tttgaaacat | ctcttggaact | tctctgctct | 77640 |
| tccagggccca | ttgccaccga | cctggaatgt | gtccttatcg | tttcacgcca | ggcttatggc | 77700 |

| | | | | | | |
|-------------|-------------|-------------|-------------|-------------|-------------|-------|
| agcagtcagt | cacccagatg | acctcctgac | ctctggctta | tttcaccccc | actggactgt | 77760 |
| tggtccctaaa | cacttctttc | gtatgtcact | ctaaaatctg | accctggctg | tacctttctt | 77820 |
| taactactcc | ctgactgcgt | gctgagagaa | gatgggtctt | gtcttttctt | gcctctctgc | 77880 |
| ttttgtaaac | tgccatttct | acctgaagtg | gcaactgaaa | tcatactctt | ttcataaact | 77940 |
| gtctttggct | acctcagtta | gaattcctta | tcccattttc | ctgaagcatt | tctttgactc | 78000 |
| ttctttactg | ctccccacc | cttttttttt | tctttgagac | tgaattttgc | ttgttgccca | 78060 |
| ggctggagtg | caatggcccc | atctcggtc | attgcaacct | ccgcctcctg | ggttcaagtg | 78120 |
| atttctctgc | ctcagcctcc | tgagtagctg | ggattacagt | catgtgccac | catgcccggc | 78180 |
| taattttgta | tttttagtag | agatgggggt | tctccacgtt | ggtcaggtcg | gtcttcaact | 78240 |
| cccaacctca | agtgatctgc | ccaccttcgc | ctcccaaaat | gctgggatta | caggtgttag | 78300 |
| ccactgcgcc | tgacccccat | tttttttttt | tttaaagatg | ttgaattggg | cagggtttgt | 78360 |
| agttacaagc | aacagaagcc | aactctttta | gcagaaaagg | aatttgctaa | atgatagtgc | 78420 |
| agagttctca | gaatctctag | caggatgaag | aaccaggctt | ggagaatagg | tagccacaga | 78480 |
| tacacaagca | tactgtagga | cggttcccat | gaagaggcat | ctgttgtcac | cactggacac | 78540 |
| agatggtact | gtgtctctgc | tactctacca | atgccactgc | tgtctctgac | cccagatgta | 78600 |
| gctccctctg | accctggatg | cagctccctc | tgaccctgga | tgcagctccc | tctgaccctc | 78660 |
| gatatagctg | cccctgaccc | cggatgtagc | tgcctttgac | cccagatgta | gctttctcca | 78720 |
| aaccagata | tagcggctgc | ccccttgcca | gagtgaatac | tgcgtcattg | tggttctctc | 78780 |
| ttgtcactgg | ttcttactta | aaagctgagc | tggaaagtct | aatgggcagt | tttgtcacct | 78840 |
| gctcttacct | tggtgcagtc | tagatgaggt | ctaatgttca | taagctaggg | gattttcaga | 78900 |
| tatggaaagg | gataccaatt | ttcagcagcc | aaatagagta | tcacattttc | actccatggt | 78960 |
| tcctgggtgt | ctggttatgtt | tcctgggtgt | ctgactctta | ggcttctttc | aagctgcagt | 79020 |
| ctgcctaata | gagagccctg | catttaatca | tcaaaaaggc | aaagcaatat | gaatcagcaa | 79080 |
| gggtgttttg | gcaaataaca | gcaaacctga | ctgtggcgta | agcttgtggg | attgtctcca | 79140 |
| gtgtgatcag | atctgtattt | taatttttta | aatgtaaatt | aataatgata | tgtgaatcac | 79200 |
| caaagtagct | tgagtagacc | tagaaaacaa | tgtatgtcct | ccgttttcac | agaagccaca | 79260 |
| tagtcgtggg | ttaaatgagt | cagcggcagg | gcactgtgtc | tcatagttaa | aaaaaaaaaa | 79320 |
| aagtattact | gaagtaatgc | aggatctttt | ctgaagtaga | aggcatgatg | aaccagaaa | 79380 |
| actaaagcag | caagtggcca | ccgttcttag | catagtgtgt | tctcaaactg | gaacaacct | 79440 |
| taaacagttg | tgaacaaggt | attagaagtg | atggggggcg | gggtgcggtag | cttctcccaa | 79500 |
| agctcattac | ctcccaaagc | aacccagta | ctttgggagg | atcactttga | gcccaggagt | 79560 |
| tccagaccag | cccggccaac | atggcaaaac | cccatctctc | taaaactaca | aaaaattagc | 79620 |
| tgggcatggg | ggcacatgcc | tgtagtccca | gctacttgga | tggctgaggc | aggagaatcg | 79680 |
| cttgaaccgg | gaggcagagg | ttgcagttag | ctgagatcac | gccactgcac | tctagcctgg | 79740 |
| gggacagagt | gagtctctgt | ctcaaaaaaa | aaaaaaaaaa | aaaaaagtga | tgggaataga | 79800 |
| ttgttttgtc | tcaaaaagct | ctttccaaca | ctaaaatgaa | acataataat | aaaaatatatt | 79860 |
| ttctggctat | aaaaatatcg | atgcttatta | tagacatctg | caaagtatga | aaatatatga | 79920 |
| agaaaaaaat | taaaatgccca | tcacccccca | tgaaaactat | tgttatcatt | tttgtctgat | 79980 |
| ttcttttagtg | tttctctttt | tcttttttta | atttttaatt | tttttgagta | tgtagtatgt | 80040 |
| atatctatatt | atggggatata | tggcatattt | tgatacagga | tacagtgtgt | attagcaagg | 80100 |
| ttttcttttt | aatgtttata | tttatttagt | tgagatcata | ctatatatgg | ctctatagat | 80160 |
| tactttctct | tatatacta | acatttgtgt | tattaaatat | tctgcataaa | gataatttta | 80220 |
| agatgaaatt | tgatgttata | aaaacttctc | attttattaa | gagattaacg | ctatgaaacc | 80280 |
| tgctgctata | tattcttgga | accagctgtg | acccaaaaga | tcaatgtagg | gatgtaggtc | 80340 |
| cttccccatt | ctctacacac | aaaatcagat | actctgatgt | gcagctgtag | ccccagtcta | 80400 |
| cactgtctgt | tgtatttttt | gttttctggg | gtcacgtgcc | tcccacctg | ctcctagcaa | 80460 |
| ttgccatgac | aacaaataga | taattggctt | ccgtaatttc | tcactcttatt | gcctaaggca | 80520 |
| acagagagct | tgtgggctca | gcttgcggtt | cagcagctgc | tttgttgcc | ctcctctgta | 80580 |
| tgtgtgaggc | ctgccagagc | ccactttcca | gacaggtgag | agttcattca | ttcaccatgc | 80640 |
| agttaccgat | cgtctcttga | cctgtgtcct | ggggagggtaa | agggtgacgag | ccagttctgc | 80700 |
| cccatgcagc | tcacagtcta | ggcaaagcta | catgcaaaca | aacagaatcc | aaagtgtctat | 80760 |
| catgaaccct | ctgagagggg | ctgactcagc | agcccagggg | gcttgaagaa | ggctccacag | 80820 |
| aggaggctgt | gcctcaaggc | gatttcgggt | taggagccac | caattttata | ccacttttct | 80880 |
| gtggcccgtc | ttattttatt | tcttatttct | tgacaatcag | aagtaccttg | ggtaggtttt | 80940 |
| accatgcaca | tcgtaatttg | agtgaagctta | gtgtgaggct | taacggtgtg | tgggctgtac | 81000 |

| | | | | | | |
|-------------|-------------|-------------|-------------|-------------|-------------|-------|
| atcctgggtca | gatgctccag | atggaggcag | atggttgtga | tgcaggagag | gcagccacat | 81060 |
| agcacagggtc | cccagccagt | ggactgggaa | gacagtgtag | tcatctctgg | ggaaggggaa | 81120 |
| tgacaagatc | tggcagtgtg | gcagggtcca | gaaaaaaagg | gctgggttct | gggcagttag | 81180 |
| ggtgcagggt | gagacctgaa | tactgggtgg | agccagctgt | cagagtccac | gcctgcagac | 81240 |
| tggactggtc | cacggcagg | ggatgccatg | tcttgaagac | ccacaggcac | ccactcatcc | 81300 |
| tcatgatcat | gcagttctct | ggtttctaac | agtgcagtct | gggttgcagt | ctgggagtc | 81360 |
| agcagagaag | agcaggccct | ggaatcccag | gtgtgggggc | gtggcttaac | gtggagtttc | 81420 |
| cttcagaggc | agttagtgct | tgtcattgtc | tccgtcagca | ttggctttgg | gcctagtgtg | 81480 |
| gcctcgaacc | ttctgttggg | atcagcagtg | gaacagtagg | aaaaggaatg | agtagacatg | 81540 |
| gcattgcaac | aagtcttttt | ttttttttct | gttagaatta | tcatattaag | cagaagtttt | 81600 |
| gcttcacaaa | ctctcagcca | aatacaaaat | actatgaata | gtatttacct | tgtgtctctt | 81660 |
| tccaaagaac | tcatagtgg | ttgcagctat | tgcagatata | ctggccatgc | ggtatgcgg | 81720 |
| tccttttttt | tgtttttttt | ttttttttga | gacggagcct | tgtctctgtc | cccaggctgg | 81780 |
| agcatagtgg | cgcgatctcg | gctcactgca | agctccgcct | cccgggttcg | tgccattctc | 81840 |
| ctgcctcagc | ctcccagag | gctgggacta | caggcgcccg | ccaccacacc | cggctaattt | 81900 |
| ttgtattttt | agtagagacg | gggtttcacc | gtgttagcca | ggatgggtct | gatctcctga | 81960 |
| cctcgtgatc | ctcctgcctc | ggcctcccaa | agtgtctggg | ttacaggcgt | gagccaccgc | 82020 |
| gccccggcgc | agttcctttt | tatagctgtt | tgaataggaa | agatgacttg | gaaaatgctg | 82080 |
| gattctgaga | tttatgtgca | gccttaaaaa | gtgtagtttt | tctctatcaa | taatgagtgt | 82140 |
| gggttgtaat | tgcttagtaa | gtaattttgt | ttatgtaaac | gtacatttgt | taaatttttt | 82200 |
| ttcttaggta | atcccgtatg | ttggcaccat | tccygatcag | ctggatcctg | gaactttgat | 82260 |
| tgtgatattg | gggcatgttc | ctagtgcgc | agacaggtaa | aatcactgtg | ctaaaggaag | 82320 |
| gagcatgaat | aggctgtctt | tttgtgattg | tggaaatgata | acagagtaag | gcgggagaga | 82380 |
| ccatttgata | ctytgaggcc | caattagctt | tcatcagcag | ccctggccaa | ggtgtgagg | 82440 |
| agatttgaat | gaatgactaa | ataaagggtta | ttgggattta | tttcatttgt | gtaagtctga | 82500 |
| tttcagtata | aaaaaattag | aactatcagc | tggatgtgg | gacttacaca | tacttttcca | 82560 |
| gcactttggg | aggccaaggc | gggaggattg | tttgaggcca | ggagtctcag | accagcctgg | 82620 |
| gcaacatagt | gagaccccc | ccatctgtta | aaaaaaaaaa | aaaaattaaa | aattaactgg | 82680 |
| gcttggtgg | gtgcgcctgt | agttgtagct | actcaggggg | ctgaggtagg | aggatccctt | 82740 |
| gagcccagga | gtttgagggt | gcagtgcgct | gtgatggagc | cactgcacta | tagcctgggt | 82800 |
| gacaaaaaaaa | aaaaaaaaaa | aaaaaaaaaa | aaaagaaaga | aaaagaatta | ggtatgtcat | 82860 |
| taaagaaagg | aattgtggtc | agatgacagg | gagagtctag | ttttagtctg | acattcccac | 82920 |
| agcatcacag | atctagtcca | gatgggttta | ctgaataact | gctttggata | caagctgtgg | 82980 |
| tatcattagt | gttgggctca | gctctgtgta | cctaacacct | gaagagcagt | ggtttaagat | 83040 |
| gtgaaaatta | agtctcaagg | agacagccca | ggccttttca | gttaactcct | tcaagtctgt | 83100 |
| agagaagtag | actccttcca | gcttaccact | ctgctatctt | gaggggtgag | tgagggtccc | 83160 |
| tttcccatta | tccttggcag | ctagatttcc | agccctcact | tctgtgcttt | gggtagctgg | 83220 |
| atgggtgcat | gtggtgtttg | cggggaaaca | gagctggaca | aaaggcaagt | gcttgcctgac | 83280 |
| ttttaaggga | gtttctagta | gccttcctctg | agcacttcac | ttccatctta | tcagcagagc | 83340 |
| tttagctgca | caggcaggcc | tagctgcgag | ggaggctggg | aaaggtaggt | ttttattctg | 83400 |
| ggcagattca | gacccagttc | aaactcaggg | gctattttac | tgagggaagac | agaaaagatt | 83460 |
| agacagtcag | ctcttttaggc | ctcatagtga | atgaatgagg | agggattgg | cagtcccttg | 83520 |
| tactggggcc | tggagtgtag | tgcctgctgg | gcctttactg | gtggctttcc | tttctgagca | 83580 |
| ctcatgaggc | ccctgtgtct | tccctcatat | agattccagg | tggatctgca | gaatggcagc | 83640 |
| agtgtgaaac | ctcagaccga | tgtggccttt | catttcaatc | ctcgtttcaa | aagggccggc | 83700 |
| tgcattgttt | gcaatacttt | gataaatgaa | aaatggggac | gggaagagat | cacctatgac | 83760 |
| acgcctttca | aaagagaaaa | gtcttttgag | atcgtgatta | tgggtgctaaa | ggacaaattc | 83820 |
| caggtagggt | ttggagaggg | acaggttgag | tcttcattag | tgagcaggag | tgcacagggg | 83880 |
| ggcctttcac | atltgtgagc | ccagccttgt | atltcctaca | cctgagatat | agtttggtct | 83940 |
| tgtagtcttt | ctccataaaa | ggaccaggaa | ggcacctaaa | tatgaggggg | tggcaccact | 84000 |
| actctccagc | cagttgtttg | catgcagaaa | tatggtccac | tgtgactaga | tctttttatt | 84060 |
| agatcctatt | tctcctagca | gggctgagtt | ctgaattgac | acagtattat | gttcatgatg | 84120 |
| ggagggtgaa | ttataatata | accgtcacca | cctgaagaac | taacaagggc | aatcccagca | 84180 |
| tagaaatcag | aagggttttg | taaattcaag | tcttgccaca | agacagttct | gtaggatcat | 84240 |
| gagattttta | gacccagagg | acatcctaga | aatccttgat | gtcagttcca | tctctggctt | 84300 |

| | | | | | | |
|-------------|-------------|------------|-------------|-------------|-------------|-------|
| catggagtgt | cttataccta | gcgcgcgtgt | gtatggttga | atttgggtccc | agaagctctt | 84360 |
| acacctgctg | gcccctctggc | ctgtggagct | ttcccacagt | agaggtttgt | accaacgtga | 84420 |
| gagaagactc | acatgcctct | ggcacagatc | ctttctgac | ttcgggatac | tgctcctgcc | 84480 |
| cgaaagtctt | tctgaatctc | ccaaactcca | ttcacctctc | ccttctctgg | ccttttgagc | 84540 |
| ccgtgtctgt | atcattcttt | ttcacagttt | ttaacagttg | tgctttggct | ttatgtgttt | 84600 |
| attttgcctc | cacaatggga | tttaaagctc | cttgagtcag | agactatatt | gtatgctgct | 84660 |
| cgcgttttct | gcctataacc | taacgtggta | cctggcattt | gagagggagg | gagggaggag | 84720 |
| gctcgtagcg | tgccgaggac | ctgcagaagc | tactttctcg | tcactctact | gtagtctgtt | 84780 |
| gaggtagaga | ttgttcctac | ttcagaataa | gaaaaccgaa | ttcaaataatg | ttgggttaact | 84840 |
| tgtccatatt | aatttattta | gcaaatacaa | cagattttga | gtgtctgcca | catgggtggt | 84900 |
| ctccagggac | agtgttgtgg | ggagctcgca | ggcagatctt | taacctgggt | tcacaatctc | 84960 |
| cagggcacct | gtgcctgggc | ttccaggcga | ccttcgaacc | cagatgtctc | acatgtatgc | 85020 |
| agaggcgcac | acaagcacac | gcacatatac | ttatgactgc | ctgtttgtct | ggggagagac | 85080 |
| agttcctggt | gcttaatcaa | atcaggaact | caaaagaagt | tcggaagcac | tgctggtgtt | 85140 |
| ttgggtgctt | tcggttacca | tttggtcacg | tgtgtggaga | cctgtgggaa | caggtataaa | 85200 |
| attggacgca | aggaaacatt | ttaaatttga | taataagtta | atttattaac | tgtttttttt | 85260 |
| tggtggcggg | ggggctctgt | cttctgtatc | tctctaggtg | gctgtaaatg | gaaaacatac | 85320 |
| tctgctctat | ggccacagga | tcggcccaga | gaaaatagac | actctgggca | tttatggcaa | 85380 |
| agtgaatatt | cactcaattg | gttttagctt | cagctcgggt | agtgaccttc | cacagcttgg | 85440 |
| ggtcttttat | gaggatgggt | tctgatgaga | tggtagaaaa | aatcttcaaa | taacacttct | 85500 |
| attgacataa | aaaggacgta | tctccctgac | tgtagtatta | attttttgga | agtgaactgt | 85560 |
| tcacactagc | agaaggctgt | ttatcagcca | gggcttcatt | gtctgtagga | tctcaaacct | 85620 |
| agtgtggttt | taataaaaaca | cacacagttt | ttagctgggt | agcagctatt | tcctttgcat | 85680 |
| gggcataaaa | tggagtattt | ctgtaagaca | ggttcctagg | ctgggagtgt | ctgagtcaaa | 85740 |
| gagcacagtc | atgtgttgca | taaggacagt | tcagtcaaaag | atgaaccgca | tatacaaccg | 85800 |
| tggtcccata | agattgtcat | atactgtatt | tttaccatac | cttttctatg | tttaggtaag | 85860 |
| tttatatgca | caaatactta | ccatcctgct | ctggttgcct | acagtatttg | gtacagtgcc | 85920 |
| tgctgtacag | attcactggc | caggagctat | aggccacacc | ctacagccta | ggtgtgtagt | 85980 |
| tggcagtacc | atctaagggt | gttaagtaat | attctgtgat | gtttgcacga | tgacaaaagt | 86040 |
| catgtaagga | cacatttctc | agaacatacc | cccttcgtta | agcaacacat | gactgtcttt | 86100 |
| gcattgaaaa | ttttgataga | tactaactcg | cccttcacaa | gggtaaaaac | agtttgcaact | 86160 |
| ctcaacagcc | atgctcccac | cttcttggtg | acattacatc | ttattctctg | taatgtttgc | 86220 |
| caatctgatg | gggggcgga | aggaccccag | tgtcaagtat | atttttggat | catagttttc | 86280 |
| aagcatattt | ttagtaccat | ttataatttt | tttatatgtc | aaacagggtta | tatatagaaa | 86340 |
| atattttcta | ctggatgtta | caaattaatc | tttattatct | tttctcagga | cttacaaagt | 86400 |
| acccaagcat | ctagtctgga | actgacagag | ataagtagag | aaaatgtaaa | tattaaatct | 86460 |
| tttaatgagc | cactggttta | aaaatgttgt | tttagctgcc | atgttaatga | aatggcaaga | 86520 |
| aggctgggtt | tttgaaaatt | atgcttttag | aacgcaagta | atcacttgaa | aattgagata | 86580 |
| catacttggtg | gtgccaggca | cgcagtaagt | ttttgctgat | gattcacctg | tcagtttctg | 86640 |
| taactgccac | tcactgttct | tatgtaaaaa | gcactctctc | actcttaact | gctgaatagt | 86700 |
| actgttctgg | ggtatttcca | aatattgaac | atcagccagt | gcactggcaa | atgaacttcc | 86760 |
| atgtgtatct | tcaaccctcg | ggagaataac | tgcaatttaa | aaatgcgctg | ttattaatgg | 86820 |
| agaaagtgag | gtcttaccga | ctggcacggt | cacacctcac | agacagaata | gaatcttagc | 86880 |
| attctggggg | cacctgggaa | aggacaacta | agacacgttt | gaagtccatg | tagtgctggg | 86940 |
| tgaaggtggt | ggctcaggcc | tgtagtccca | gcgctttggc | tgaggtgggg | ggattgcttg | 87000 |
| agcctaggag | tttgagatca | gcctgggcca | catagggaga | accccatctc | tacaaaaaat | 87060 |
| taaaaaatta | tctgggcatg | gtggcgcatg | gctgtgatcc | cagctttggg | tggtggaagt | 87120 |
| aggcggatga | cttgagccca | ggaggttgag | gctgcagtga | gccatgattg | agccactgca | 87180 |
| tcccagtgtg | gatgacagag | taagaccctg | tctcttaaaa | aaatttcata | tagttctatg | 87240 |
| aaaaattatt | aatttatggt | ggaggataaa | ggactcagat | gaacagggat | atcagactct | 87300 |
| cttctcaacc | cgtgtagccc | ttcacaacac | cataccatct | cgtcataaag | caccagctgc | 87360 |
| ctggagggtca | caccagagtg | gagcaggaac | atcccaggct | ccggccaggc | tcagctcagc | 87420 |
| acaaccaaga | cttcagatta | taaactataa | ttcttcccct | tctaacattg | ttgtgttttg | 87480 |
| tttcttttcc | aataggttcc | aaagtctggc | acgccccagc | ttgtgagtat | ttttgcctgg | 87540 |
| gttatttcat | gtggaatatt | ttataaagtt | gcatagaaaa | tgaacagttt | aaaccgtgga | 87600 |

| | | | | | | |
|-------------|-------------|-------------|-------------|-------------|-------------|-------|
| gggcagcttc | attcattcca | ttccttactg | tagaactggt | tccctacagc | ctagtaatag | 87660 |
| aggaggagac | atttctaaaa | tcgcacccag | aactgtctac | accaagagca | aagattcgac | 87720 |
| tgtcaatcac | actttgactt | gcaccaaagt | accacctatg | aactatgtgt | caaagggttg | 87780 |
| aagagcccca | aattttctta | actctgtata | aaaattaagt | tgtaatgagc | tgttacgagt | 87840 |
| aacctgtatc | cacaatagaa | gccccaaagca | gccccctctg | catttggtgtg | ccgtccctgg | 87900 |
| atggattcga | gagtcaacca | ggcctgcctc | tgagccattc | ctgtgtattt | cctcagcacc | 87960 |
| tccctgcttg | gctgcttccc | cttcaggcag | aacacagtac | tgccctcagac | cccaggcaca | 88020 |
| gggggccttc | ctggcgtggt | tcactcatac | agagggcattc | gggtcccacc | ctgtcactca | 88080 |
| tttcatcgtc | taaaatgtaa | tcattgagtg | ttgcttcgag | ccaggggacag | tgctgctgca | 88140 |
| ggggacccag | ctgggacca | ggcagactgt | ctctcccctc | ctgggattta | cagggtcatg | 88200 |
| gctctgaaac | attctgtagt | gttcttttga | cacgagtttt | ccctggagat | cgctttctgc | 88260 |
| aggcctcttg | gtcctgactg | tggtctcttt | tcagagcctg | ccattcgctg | caagggtgaa | 88320 |
| cacccccatg | ggccttgagc | gaactgtcgt | cgtaaaggga | gaagtgaatg | caaagcccaa | 88380 |
| aaggtcagta | tccttcggta | ccagtcacag | tcagataact | tccgtgcctg | ttaccgcctt | 88440 |
| ctaccctgta | acggctcctg | gagctggaag | tagggctagt | gtcagaatct | tcattttccaa | 88500 |
| agtgagatga | ttcaagcagg | aggtgggttag | attgtgaaca | gccagtgggc | agcagagccg | 88560 |
| actaaggccg | tggtctgacc | tcggcttttt | ctggccagac | aagagagtag | cattttttgtc | 88620 |
| cacgaggcct | atccttgctt | tgtagaactc | cagagcagcc | ccgtaagatc | aggcaacatc | 88680 |
| ttttcttttt | ttttttgaga | tggagcctca | ctgtgtcacc | caggctggag | tgcaagtgtca | 88740 |
| caatcccagc | acaccacaac | ctccgcttcc | tgggtgttca | agccattctc | ctacctcagc | 88800 |
| ctctggagta | gctgggatta | caggcgcacc | accacgcccc | gctacttttt | gaatttttgt | 88860 |
| attttttagta | gagacagggg | ttcaccatgt | tggccaggct | ggctctggaac | tcctgacctc | 88920 |
| aagtgatccg | cccacttcgc | cctcccagtg | ctgggattac | aggtgtgagt | cgccacgccc | 88980 |
| agcccaggca | acatttttta | gggcccctct | tgctatgtga | tttagaaaat | ttctgcttta | 89040 |
| acaacttttt | ccacagacgt | ccagccttct | gaaagcttga | aattagagct | atttcctaga | 89100 |
| aagtggcata | ctttcaagaa | ggaaggaaca | cgggtagatg | atgaaaagag | aatacctgct | 89160 |
| tgagaggatc | ccaggctcct | gcagcctgaa | gtagtcattc | agtttagcgt | taaaccttcc | 89220 |
| atttctgtcc | aaccacatct | cagcctcaat | gctgatttta | aagggttttt | ttttttcgta | 89280 |
| tttttatttt | gcaagtaacg | aattagtggg | atgctgactg | ggttttaa | ttcaacttca | 89340 |
| cctgcattcc | catgtccatg | tggatacgtg | tgtttcatag | agttagaatc | atagttcaag | 89400 |
| tctggctact | aacattgctg | aaattgccac | tactctgtcc | tacttggtta | attaagggtt | 89460 |
| tttttttctt | tctttctcaa | aagctttaat | gttgacctac | tagcaggaaa | atcaaaggat | 89520 |
| attgctctac | acttgaaccc | acgcctgaat | attaaagcat | ttgtaagaaa | ttcttttctt | 89580 |
| caggagtcct | ggggagaaga | agagagaaat | attacctctt | tcccathtag | tcctgggatg | 89640 |
| tactttgagg | tgaggttcca | gtttttgaaa | atgggacagc | aataagaatc | ctgggagcag | 89700 |
| gggtgggata | agtgggtccat | ttaaatcaag | tcctaactca | gtatgtggag | gttgtgtatg | 89760 |
| ttttttgttt | acttgagat | tgtaatgtgc | cccttccttt | ttataacgtg | ggcaatcagt | 89820 |
| ataaatggca | aagccagtag | agtgtcaaat | tatgcacatt | ggaattgaca | tttgtcatca | 89880 |
| tattaaaatt | cctgtgtagc | cccatattga | taggaattta | accaggaagc | ttgtctcagg | 89940 |
| actggagtc | cacattta | catataagca | gacttgagga | ctggagacc | taaaactgct | 90000 |
| tgcttgact | ggccatcatc | tcctcatcag | gtaggtggca | gtcctttctc | ctaaggagtt | 90060 |
| agtcttggtt | atatgtattc | aaggaaaaat | acatcagttc | cttggaaacta | aaaggcatgc | 90120 |
| agtcctgagt | ccccagatag | gtgaatattg | taacacatac | ctttcccgaa | atatgtttct | 90180 |
| gggatgctga | gcagagaata | gtctccttgt | gatgtggatg | ccgggtgttt | ggccagcctc | 90240 |
| aatcaccagc | tcaggtgcca | ctgcctcaca | cagtcactta | gggtcattgg | tttaggttat | 90300 |
| cattctacag | catttttaaac | tgacacattg | tctggacctt | gtgggttctt | gaggactcat | 90360 |
| caaaaccgct | tactaaaagc | atgaatatca | ggcgaaatag | atagcaatgt | gacattcgta | 90420 |
| tttatcccta | agttccagtc | taatgcagtg | ccctgggtatg | tggagtgtag | acagatgtgg | 90480 |
| gctaatacatg | gaagggtccc | tgggaagttgt | ggatattggt | ttcgaattca | gaaagctggg | 90540 |
| aaggatgtgg | aaggctgaag | gttggctttt | ctagatttag | ggcatgattt | gaacaagttc | 90600 |
| ttagaggtgg | gaagggcagc | acaggggtgt | tggcttgcca | agagtcaagg | tgcaaagggg | 90660 |
| gacttggggg | tcactggagg | gaaacagaga | tgagtgtctt | agaaggaagt | tgagccttgt | 90720 |
| gggtgggtgac | aggaaaccaa | tgatgtaact | tgtttttgac | ctatctgggc | cccaagtttg | 90780 |
| gatctgctat | attaatataa | aaaaggataa | taatgatata | ttcaaataat | gctgaaaaat | 90840 |
| actaagatga | aaatacctcc | aacttcgtaa | ttcaaaccat | accattagga | ttaggtgaac | 90900 |

| | | | | | | |
|-------------|------------|-------------|-------------|------------|-------------|-------|
| cacattccag | gcgttttttt | gcagagacag | tgaaagggat | ggctggctga | aggaatgaat | 90960 |
| agatgaatgt | tatatgcttt | tgaacaatcg | tcttttccat | ttaattttct | aattcaggag | 91020 |
| cagtaattat | ccttggtgtg | atcactgctg | acgattttct | atactgatag | gtcctttccg | 91080 |
| ggggcttcca | tctcttgcc | tttaaataatg | cttgcaattga | gattatctca | ggcttttcca | 91140 |
| ttatgccatt | actttcattt | taaatcttct | tgctctttca | aatacacttt | agttgtatct | 91200 |
| acagtgtttt | aaaaacaatc | tcattcagtg | ttgtaatttc | atctgtgggc | tcttccctctg | 91260 |
| gatgaaatcc | gtgttcctcc | cagctgttcg | gcagcatcag | atgggtgtga | gggattctgt | 91320 |
| tgttctgttt | tcttctaggc | aaaggatgtg | ccttcttttc | atgtgcagta | gtctgctcac | 91380 |
| ccggaagcat | gtcatttctt | tgccacttgc | ttgtaattca | ctggctttgc | acttgctctg | 91440 |
| atacagtaca | ggtaactaat | tgactccctc | tgctgccaac | ttggttttcc | ttctgagcta | 91500 |
| tagcatcagg | ctgtgtgttt | tgtgttttct | tgagattttg | ttaaatata | ctgggggtccc | 91560 |
| ttctacctgg | ttggaactgg | gattcccacc | attcttgtgg | ggatagaatc | tcagggttaca | 91620 |
| cctatttccc | caatcctctg | tagccacaga | agcttcatct | tggccagctc | tgttatcaga | 91680 |
| gtgcaggact | tgggctgaaa | tttccctccc | ttcctgattt | tccttgacag | tcctttccac | 91740 |
| tgctcctatc | aatcaaaaga | atgaaaaccc | tcaacttgct | gctttgcaga | ttcagggtttt | 91800 |
| gtgcttcttt | ctggcctctc | gggggtggggc | cgggttagca | gcaaggctga | gctgcccctc | 91860 |
| tttcttctga | agccttcctg | ggggcgagga | gcacagggag | agctcagtg | agggcctccc | 91920 |
| agtggccttc | tcagagtggg | tggaaaccca | gcctggcact | ggcagcgtgg | caccagaagt | 91980 |
| atgaagtgt | ggtgtaaagg | tgatgtaaaa | ggctagtagg | ttttttggtt | tttcattggt | 92040 |
| tgagttttgg | gcatagatga | ctgtgaaggg | cgaacactgc | cgatggatct | gaatgaattt | 92100 |
| gtagtatgtg | caccacttcc | aacttacggg | ataccagct | ttgacggctt | tggacaaaac | 92160 |
| cactgaggcc | aagatgtgct | gagcttatca | ggatcaggat | caccaagcag | ctgtaaaaac | 92220 |
| cctagcaagt | gccttaagct | gctgaaattt | catattaatt | gtctgggttg | ttcatggtcc | 92280 |
| tagagtgtga | ggcagaaaag | tcaggatcca | agtccttgg | ttccaggcta | cagctggaaa | 92340 |
| cagcatctcg | gtgaaactaa | gcaaccatat | taggagtttt | cctgctttag | gagagtcccc | 92400 |
| agcatcggcg | aggagggggc | agcactctgg | ctttccagga | gcaaggggca | ggatgcggcc | 92460 |
| gaggagagag | ggctgtgttg | aggaaaggag | ggccgcaggc | cctggggatg | gtgtgaggct | 92520 |
| ccaaacatgt | ccgagtcact | tccttgggtg | ggatgaggca | gacagtgcc | ccaccaggga | 92580 |
| cacttttagt | agattaggg | cttggaagtc | acagaaggaa | gtcagcagca | gcaggctgga | 92640 |
| acttttctat | gtataatcaa | atggtttact | ctgacaccgt | tagcatgtaa | caaacacaaa | 92700 |
| attttaact | aaggggaacc | actaatggca | tgttttcttt | cctttcagat | gataattttac | 92760 |
| tgtgatgtta | gagaattcaa | ggttgcagta | aatggcgtac | acagcctgga | gtacaaacac | 92820 |
| agatttaaa | agctcagcag | tattgacacg | ctggaaatta | atggagacat | ccacttactg | 92880 |
| gaagtaagga | gctggtagcc | tacctacaca | gctgtacaaa | aaaccaaatt | acagaatggc | 92940 |
| ttctgtgata | ctggccttgc | tgaaacgc | ctcactgtca | ttctattggt | tatattgtta | 93000 |
| aatgagctt | gtgcaccatt | agatcctgct | gggtgttctc | agtccttgcc | atgaagtatg | 93060 |
| gtggtgtcta | gcactgaatg | gggaaactgg | gggcagcaac | acttatagcc | agttaaagcc | 93120 |
| actctgccct | ctctcctact | ttggctgact | cttcaagaat | gccattcaac | aagtattttat | 93180 |
| ggagtaccta | ctataatata | gtagctaaca | tgtattgagc | acagattttt | tttggtaaaa | 93240 |
| ctgtgaggag | ctaggatata | tacttggtga | aacaaccag | tatgttccct | gttctcttga | 93300 |
| gcttcgactc | ttctgtgctc | tattgctgcg | cactgctttt | tctacaggca | ttacatcaac | 93360 |
| tcctaagggg | tcctctggga | ttagttaagc | agctattaaa | tcaccggaag | acactaattt | 93420 |
| acagaagaca | caactccttc | cccagtgatc | actgtcataa | ccagtgtctc | accgtatccc | 93480 |
| atcactgagg | actgatgttg | actgacatca | ttttatcgta | ataaacatgt | ggctctatta | 93540 |
| gctgcaagct | ttaccaagta | attggcatga | catctgagca | cagaaattaa | ggcaaaaaac | 93600 |
| caaagcaaaa | caaatacatg | gtgctgaaat | taacttgatg | ccaagcccaa | ggcagctgat | 93660 |
| ttctgtgtat | ttgaacttag | ggcaaatcag | agtctacaca | gacgcctaca | gaaagtttca | 93720 |
| ggaagaggca | agatgcattc | aatttgaaag | atattttatg | gcaacaaagt | aagggtcagga | 93780 |
| ttagacttca | ggcattcata | aggcaggcac | tatcagaaag | tgtacgccaa | ctaagggacc | 93840 |
| cacaaagcag | gcagaggtaa | tgcagaaatc | tgttttgttc | ccatgaaatc | accaatcaag | 93900 |
| gcctccgttc | ttctaaagat | tagtccatca | tcattagcaa | ctgagatcaa | agcactcttc | 93960 |
| cactttacgt | gattaaaatc | aaacctgtat | cagcaagtta | aatggttcca | tttctgtgat | 94020 |
| ttttctatta | tttgagggga | gttggcagaa | gttccatgta | tatgggatct | ttacagggtca | 94080 |
| gatcttggtta | caggaaattt | caaagggttg | ggagtgggga | gggaaaaaag | ctcagtcagt | 94140 |
| gaggatcatt | ttatcacatt | agactggggc | agaactctgc | caggatttag | gaatattttc | 94200 |

| | | | | | | |
|-------------|-------------|-------------|-------------|-------------|-------------|-------|
| agaacagatt | ttagatatta | tttctatcca | tatattgaaa | agaataccat | tgtcaatcct | 94260 |
| atTTTTTTaa | aagtactcag | tgtagaaatt | gctagccctt | aattcTTTTc | cagctTTTTca | 94320 |
| tattaatgta | tgcagagtct | caccaagctc | aaagacactg | gttgggggtg | gaggggtgcc | 94380 |
| cagggaaagc | tgtagaaggc | aagaagactc | gagaatcccc | cagagttatt | tttctccata | 94440 |
| aagaccatca | gagtgcTTaa | ctgagctggt | ggagactgtg | aggcatttag | gaaaaaaata | 94500 |
| gccactcac | atcattcctt | gtaagtctta | agttcatttt | cattttacgt | ggaggaaaaa | 94560 |
| aattttaaaaa | gctattagta | tttattaatg | aattttactg | agacatttct | tagaaatatg | 94620 |
| cacttctata | ctagcaagct | ctgtctctaa | aatgcaagtt | ggccttttgc | ttgccacatt | 94680 |
| tctgcattaa | acttctatat | tagcttcaaa | ggctttttaa | ctcaatgcga | acattctacg | 94740 |
| ggatgttctt | agatgccttt | aaaaaggggg | cagatctaata | tttatttgaa | ccctcacttt | 94800 |
| ccaacttcac | catgacccag | tactagagat | tagggcactt | caaagcattg | aaaaaaatct | 94860 |
| actgatactt | actttcttag | acaagtagtt | cttagttaac | caccaatgga | actgggttca | 94920 |
| ttctgaatcc | tggaggagct | tcctcgTgcc | accagtggtt | tctgggccc | ctgtgtgagc | 94980 |
| agccaggtat | gagctgtttt | agaagcagcg | tgttgccctt | atctctccc | ttcccaaaa | 95040 |
| gaacaaagga | taaaggtgac | agtcacactc | ctgggttaaa | aaaagcattc | cagaaccact | 95100 |
| tctctttatg | ggcacaacaa | agaaacgaag | gctgaagttc | gcctacccaa | aatgaaaagt | 95160 |
| aggctttaca | gtcaaaagta | cttctgttga | ttgctaaata | acttcatttt | cttgaaatag | 95220 |
| agcaactttg | agtgaaatct | gcaacatgga | taccatgtat | ataagatact | gctgtacaga | 95280 |
| agagttaagg | cttacagtgc | aaatgaggcg | tcagctttgg | gtgctaaaat | taacaagtct | 95340 |
| aatattatta | ccatcaatca | ggaagagaat | aataaatggt | taaacaaaca | cagcagtctg | 95400 |
| tataaaaaata | ccgtgtatca | tttactcttt | ctgcagctct | atagcatagg | caggagaggc | 95460 |
| ttatgtggca | gcacaagcca | ggtgggggatt | ttgtaacgaa | gtgataaaac | atttgtaagt | 95520 |
| aatccaagta | ggtgtattaa | ggcaccaaaa | gtaacatggc | acccaacacc | caaaaataaa | 95580 |
| aatatgaaat | atgagtgtga | actctgagta | gagtatgaaa | caccacagaa | agtcttagaa | 95640 |
| atagctctgg | agtggctctc | ccaggacagt | ttccagttgc | tgaatagtct | tttggcactg | 95700 |
| atgttctact | tcttcacatt | catctaaaaa | aaaaaaaaaa | aaaaatcaaa | attaaaatct | 95760 |
| gagtcagtct | gcctgcctcg | gttctcatta | gtttaattct | taatgccttg | cactttccag | 95820 |
| caatcattca | atcaaaagag | tgaaatgaag | cacattaaca | aagcaggagg | cgccacggac | 95880 |
| cgctccctc | cacaccgctc | cttcgcctt | cattccttgc | ccacaggctt | gcaactggaag | 95940 |
| ctgaataaga | atcccaaaaa | ctcaaaactt | ctagggatgc | caccccttta | gtagctcaca | 96000 |
| cctccccct | ccaagagcta | agaaacaaag | gagaatgtac | ttttgtagct | tagataagca | 96060 |
| atgaatcagt | aaaggactga | tctacttgct | ccaccacccc | tcctttaata | ataacattta | 96120 |
| ctgttatctt | ctgggcctaa | gacttatgtt | ccagaactgt | cacagctccc | catgtcacac | 96180 |
| ccactagctt | gtgatctttg | tcaaataact | gaaatctttt | aagcctctag | tttcttccct | 96240 |
| tgtaaaacag | agataaaaatg | ttgtggtttt | taagtgaagat | aatccaagta | aagcacctaa | 96300 |
| catggagtag | tgaatgaaca | tcggttgcta | ctaaaagtgg | acatcctacc | gcacccctaa | 96360 |
| tgccactagg | catttccata | caatctgggg | acccaaactt | caatcatata | aatgtatgag | 96420 |
| gttaattaaa | aacactactg | taatctgctt | gtatgatcac | aaaccaccac | aaaagaaaag | 96480 |
| atcgtgaaga | ttacactgta | aacggactct | caaatgatca | ggaggtgggtc | acttcgcaac | 96540 |
| ttgctccctc | caccacactc | aaaacaggag | ctcgagcctg | cctgtatttg | agactggagc | 96600 |
| tgccctgtatg | aggactggat | caactgctag | tcacgttata | tccaaatctg | cattatcatt | 96660 |
| gggcacattt | tcacagaatt | ttactgaatt | attccttaat | tgtttaatgg | ttgggaatag | 96720 |
| tttgggaatt | accttccatc | aactctgcta | agaaaggaat | ggattctggt | agcaagacaa | 96780 |
| tataattctc | cttttagttt | tcagccagtg | ctaacacagt | aatcaaagca | gcaaatcgaa | 96840 |
| cctgaaaggg | ataaaagagc | aaagaaataa | aaagttagtg | tactgtattt | attatcttaa | 96900 |
| gagctgtact | gacttgagac | aagctctaac | tttttaaaaca | ttagtccaca | cgcgtttatt | 96960 |
| cacttcatta | tgttcattaa | gctttcatct | tagaatacca | gtttcaccat | ttgggagctg | 97020 |
| tttgtaatat | gtgcaacctt | ataaatagtg | ttttccaaac | tgtgtcccag | gactgcaaat | 97080 |
| ctttaatgtg | aaatgtcttt | ttataatctc | ttccttttaa | aaaaaccaat | aaaataaaat | 97140 |
| gccacatgca | aactcaagtg | tgtcaccaga | ttttacttca | ttggcgctcg | ccagcccgc | 97200 |
| aggctggcaa | taaagtgcct | ccagccacct | ctggcagggtc | tcctcaccca | cagcccctga | 97260 |
| ctggtcacca | ctatagttgt | atgagggggc | aggacaatcg | cttgggataa | actcccatct | 97320 |
| cagcactgaa | taaaaaacat | tctgtgtcac | aatatcctag | ttttggggct | ttaaaaacgt | 97380 |
| ctaggtgttc | ctcacatgcc | ttgtctataa | taaggaaaagc | aagcagtagt | tgggtattgt | 97440 |
| tagcttttga | aacaaaagcc | ctactggtct | tctaattttg | gatattttta | ttaaagaata | 97500 |

| | | | | | | |
|-------------|-------------|-------------|-------------|-------------|-------------|--------|
| tctggacagt | acaaagtgaa | ttattaaaaa | accatttgta | actacctaga | ttcaatcagg | 97560 |
| atttccttga | tttgtgcaaa | gtaaaaatatt | acaataaatt | tgatactgct | acttgtataa | 97620 |
| aaacctatgg | tttaaaatgt | gggggttcat | cataatagtc | tcattgttag | catatcctaa | 97680 |
| taaagaattt | gaactaataa | atcctattaa | taaaattctg | ctttggctcg | ttatagccag | 97740 |
| taaagtctta | atacaatcat | tagtttgaga | aatgggtgact | cattgctaaa | acagtttgaa | 97800 |
| atttgtaaca | cttgggtgtc | aaattttgac | ttccactcaa | cctacccatg | ttttatttcc | 97860 |
| actgccacca | cttactcaac | aagatcataa | gcctagtatc | tataaacaac | agaatgtatt | 97920 |
| gctctaactc | aaaagactat | agtgtggata | aattcaatgc | atttctctct | ggagcacaat | 97980 |
| gacatttcaa | tagcacttaa | aaaagaagga | attacttcaa | atctttgtta | tttaaaagta | 98040 |
| tttagaaagt | atttttagtac | ttctgcccac | cgcaccattg | gggtggggat | agggcattgc | 98100 |
| tattctttac | aaatagccta | taagtaaaaa | acaaaatttt | cttaggcaca | aatttctgcc | 98160 |
| taatacaaaa | gaccagacct | ctagtactgg | atgacaaata | gcaatgttct | tccctgccag | 98220 |
| tttactaggg | ggcctacatc | tgtgaccacc | tgcaggctgt | ttaggctatg | cagtgaanaa | 98280 |
| atgcagtttc | agtacttgct | acgcagttcc | taaccttagg | cgaggagtct | ctcgtcttta | 98340 |
| gcagaatctg | gtagttcagt | ggtttccaaa | gagagtcac | cgccatggcc | actgaaaact | 98400 |
| gtgcgatgca | tggtatcagg | tgctttgtca | cccgttcctg | gaatttctct | tctcccccaa | 98460 |
| gcctgttttc | cagctaggaa | gagtaagaca | aagactttga | acaacaagtc | tcatttcttt | 98520 |
| cttctgtttg | aaaaaatgtc | caacatacaa | atattttact | atctttcatg | atattagcag | 98580 |
| gttcaaaaac | caggcattat | tctaatactc | tctagggcaa | atgtattgcc | ttctagaact | 98640 |
| caaagtgaat | ctcataccct | ttatcatcgc | ccctttctct | ccagcagaac | atctcagagg | 98700 |
| agctctttgc | tccagaggac | agccatgctc | tgacacgttc | tcagtgaggc | ccagttaaaa | 98760 |
| caaatgaata | cattaaccat | gacagcttat | atcatgtctg | tcttttgagc | agtttaaaaa | 98820 |
| ataaaaaata | aaaaataact | cagggccagg | catggtggct | cacgcctgta | atcccagcag | 98880 |
| tttgggaggg | caaggtgggt | ggatcacttg | aggtcaggag | ttcgagacca | gcctggccaa | 98940 |
| catggcaaaa | cctcatccct | actaaaaata | caaaaattag | ccaggtgtgg | aggcggggcg | 99000 |
| ctgtgatccc | agctattcgg | gaggetgagg | cacaagaatt | gcttgaaccc | gggaggtgga | 99060 |
| ggttgcagcg | agccgagatt | gcaccactgc | actccagcct | gggtgacaga | gcaagaccct | 99120 |
| gtctcaaaa | aaacaaaaca | aactcaaat | ccacaatgaa | gttatatctt | tgaaaaaaca | 99180 |
| attttcaaat | aaaacatttc | attaaaaaga | ccagaaaaaa | caaccttaca | aagaaaaatc | 99240 |
| ctagcaagct | gtcatttgag | cagatctaaa | acctgccaa | ctcgaacagt | gatggcttcc | 99300 |
| tcagcaacga | aagatgatcc | tgtttggtta | cctgatccac | cagaggcatc | atcaaggctc | 99360 |
| ctgctctctc | tttacttata | aaatgctggg | tatcaaaaag | gaagattttg | tataaacagt | 99420 |
| tcaaaaataa | ctgcaacagc | aagcagcact | tttcagggtc | attttcagag | tcaaaaaatg | 99480 |
| cttcatctgt | agacgtggga | agagtaaaaa | tgaaaaaaca | ctgaacttaa | ccattttaatc | 99540 |
| tccaatgttt | acattgaaat | cactattaaa | ataactaaat | cagaagagtc | taaaatgatc | 99600 |
| tagaaatcat | aatcaggacg | aaggcagaac | acaatggatg | gtctctcgaa | gaatgattcc | 99660 |
| ttctttttaga | gttaagattc | taacactcac | tctggcaagt | taaattccct | caactgtcaa | 99720 |
| gtgggtcacg | tatttagcatt | agagaataaa | ctaactctaa | tttttgcggt | ttaaagttac | 99780 |
| ttccagtaac | tgacagtaac | ggccattttac | tttattcttt | ctcccaagtg | aggtgactta | 99840 |
| taacattcgc | tcacatgct | aaaacaacac | ttcactgtct | gacaacaatg | aagtaaaaaa | 99900 |
| ttcaccctcc | ttagcttagg | acttaagaac | ctctaaaatc | ttgcttccaa | gcactagctt | 99960 |
| gtgtcttact | ggtaccttgt | ataaggcaca | caggacaagg | gtgacagctg | aactgaagcg | 100020 |
| accacccacc | tgttttggag | atgttcacct | ggtccaagggt | gtcagcaaaa | ggcttccacta | 100080 |
| agtggccggc | aaacagagta | aaaagccctt | tcagcttttc | agcaatgcaa | tctgccaaagt | 100140 |
| tgtaaaatgt | caacaacctg | tcctttgggg | catcttctgt | tttagcccaa | tcaaacagct | 100200 |
| gaaaggataa | gacagtatta | gtttcttcga | catcttgtca | cttaaatctg | agcacaaaag | 100260 |
| agaggaagag | gaagaaagcg | tcaccttgaa | gaacaggggc | ctgaatgtga | cctcggaag | 100320 |
| tttgacaacc | atggctacta | gacagtcaat | gatacaattt | tccgtttttc | caacttcttc | 100380 |
| cagatcggtc | tgaaaacaga | agagcccat | tattagagtg | ctgatacctg | actgtaaatt | 100440 |
| attttggcaa | gtaccactgt | tacacggcta | gattgttctc | ggactcttca | ataggtggat | 100500 |
| aacagcttta | ggatttgagg | gagtgaacct | gagcttacct | cagagtgtctg | ggctcggaag | 100560 |
| tccagggcct | ccaggaaaaa | ggcggttagc | tgagactgat | gggaggtgag | ctcttccctc | 100620 |
| ttcatcgccc | caatatgctc | ttgcaagatg | ctcataaacg | gacccatgtg | attctaccaa | 100680 |
| taacacagga | aaaagatgtg | ccattttcaa | atgattccta | gagttcagcg | gtgtgtattt | 100740 |
| ttaaaaacta | aatcttcttc | tttaagtcaa | agtttacaca | ttgcagtacc | acctctccct | 100800 |

| | | | | | | |
|-------------|-------------|-------------|-------------|-------------|-------------|--------|
| tctccaaagt | cttaataccc | aataagatct | aaccttccag | ttctttctcaa | tctgcttgta | 100860 |
| agtttttttg | atggcgggca | acaggactcg | gggtgcaagt | gtggtagcca | gtgtcttttt | 100920 |
| aagagatgtg | agacggatat | tagcctgtga | cgcagaaccc | atttcactag | tgattttctc | 100980 |
| cagatgaatc | acctacagga | atataaaaaa | agtgatcagg | gccactgcag | atcttcgctg | 101040 |
| acaaacacac | acttacagag | aggcttcatg | atgagggtact | agtgtttgga | aaatgcttag | 101100 |
| cactttttta | ctacacacag | agttcctttt | aaagtcagcc | ctaaacgtca | gtggataaaa | 101160 |
| ctgggcagac | acctcttgcc | caacttgccg | tcaggggcga | aggccgatgg | tagacgcaga | 101220 |
| cgcacacaca | gcacccagac | agatgatatt | cttagaggac | aggaatgcaa | gggaccacgg | 101280 |
| caagagtcaa | gttgctaaaa | aactgagaaa | gctcctcaga | gcacaggccc | ctttctctga | 101340 |
| gaaggctact | tttaaaccct | ggctgtggtg | taagtgaagc | ggtttaatac | tttgcccat | 101400 |
| ggtaatgaag | gctcctaacc | ttgtaaatgg | caaatgatca | acacaatgga | acagccagg | 101460 |
| ctcaacactc | ttgagcatct | tcaatcataa | ataccactgg | cccctagcgt | gttgacagga | 101520 |
| aaccgctgac | gtgcaataca | aaaattctgc | tttgcaagat | gccttaggat | taaacctctc | 101580 |
| acagtagaaa | cagggcccat | caatttccac | aagtaataaa | aggcggctct | accagcccaa | 101640 |
| ctccaaagat | ctcacagaag | aaaaaaaagc | cagaatacat | tccgcacaat | taaagaagag | 101700 |
| aagcatctcg | ctaaaaagtg | acccccatat | caatttcaag | attaagtggc | aaggatgatg | 101760 |
| gaagagaaaa | agtacacatt | taataaaaagc | aagcacatct | cttcagaaat | aagactcctt | 101820 |
| tctgtcaaac | ggaaactaac | ccttaaagaa | aaaacaaaat | cactacattt | gtgatctttt | 101880 |
| accttcccc | gccaccctgc | gtagcatgtc | gtggctatcg | tggctcacct | gggagagaat | 101940 |
| gccttccaga | taggggctga | tgaagtgcgg | gagagtctcc | acaaccttct | gcagagcagc | 102000 |
| caaggcactg | agcaggtaga | cctcgctgga | gaccagctcg | ctggtgttct | tcattgttgt | 102060 |
| cagcaacgat | ggcatcaggc | tagaaacaaa | gtaagagctt | tagaagaact | tgaagcagaa | 102120 |
| acagaggcta | gggaatggag | tagagggcat | tatgaaaaaa | accagcaaac | tgtgcctatt | 102180 |
| acatcgctat | ctgcctcata | gcctaaaaag | cagtgtctat | acattttatg | tggcataagca | 102240 |
| caagaaatct | cccagtgtct | acagtatgga | cacaaacagta | atttaaaaaa | taacaatgtc | 102300 |
| tttcattaac | tgaacactta | ctatgtgtca | ggcactatgc | aaaactcctt | gcaagcactg | 102360 |
| ccctacagaa | atcctatgag | gtagatactg | tctctgtttt | atagacagca | aagctctaac | 102420 |
| aggttaagga | acatactggc | tgtacagtaa | ggaactacca | cagccaggag | cttctaactt | 102480 |
| ccaaatttgg | cagcagaagg | cagctttggc | cttgccctaac | tgggtggggc | cctctgccaa | 102540 |
| gaaccttcac | ccactgcttt | ttgactatac | tagacaaaag | gaagggaagaa | tggaggacga | 102600 |
| ttaacactgc | aaagcagtgc | atctgaagat | aaacgggaag | gctgcatctt | tctgtttgaa | 102660 |
| gattaattat | ttttattatt | atctctttta | gagacagggg | ctcactctgt | tgcccaggct | 102720 |
| acagtgcagt | gggtgcagtca | tagctcactg | cagcctcaaa | ctcctgggct | caaagtatct | 102780 |
| ccctgccttg | gcctcccaaa | gtgctgggat | cacagccgtg | agccaccaca | ccctgcaaga | 102840 |
| tcaattcttt | aacaaattcc | aattttatgc | aacgtctact | cagaggaaaa | aaaaaaaaag | 102900 |
| tcaccaaagt | gttatttttc | aatgtgtgcc | aggcggtaac | agctcctgtt | ccaagtctcc | 102960 |
| ggccgcatac | ctgggaagct | gggggatggc | cagcgctcc | agggtggagg | tcacctctgc | 103020 |
| tatgcacagc | agcgcgttcc | ccaagacatt | cttctcctcc | tttctctctg | gagcaatcag | 103080 |
| tttcacagca | gtgctcagca | ctgggacaaa | aggatctgga | ttttctgcac | caaaattctt | 103140 |
| gcataaaaagc | tttaagggtat | acaacgctgt | ctgtctgttg | attgcttggt | cttcttcccc | 103200 |
| ttcctttttc | ttacgtgca | caatggccaa | aaggtctgga | accagtttta | ggaaacgggt | 103260 |
| aacctgaagg | ggacagccag | aatccccaaa | tcattaaagc | tgcaaaaaat | gtttgtccat | 103320 |
| tttcccattg | tcacagcttg | agattgtcta | aatggaaatc | agactcgggg | gtcctgagtc | 103380 |
| acacagtcac | gctaagcgat | gtgcatgttc | tagccagtgt | ttcacttata | caaagcacc | 103440 |
| actgatctgg | agtaaaagg | acttagaact | atgctaaggc | taaggccacg | taagctctgt | 103500 |
| agtaagcaag | aattccacta | ggctgaaatt | ccattctaag | agctcttaca | acacacatat | 103560 |
| attcccggtta | gaattaacgt | cacattttta | aacatgtcat | ggattatat | tcagataata | 103620 |
| atatacttca | atgtgaaatt | gtaccactag | agaaattgaa | gggagttaaa | tgcagctctt | 103680 |
| tgataaaagca | aagtacagta | aatgggtgtg | tcttgggtct | tcactcacta | ttgtcttctt | 103740 |
| ccaggatata | ttttgctgca | gcttggtatt | caaaaggctc | agcgctttgc | ggcgaacaga | 103800 |
| tggcagggga | ttgcccacca | gccctctgat | cacaggaatg | aatgtctctg | tgggcagcaa | 103860 |
| ggcattgacc | taaagagaaa | ttttatatatt | aacatgaaaa | gaaaaacaaa | ttaaaaaaa | 103920 |
| aatcaacttc | aattaagaca | gactgctgtc | cactgcacac | ctccaggcac | caggcacttc | 103980 |
| cacacacatt | ttcttattta | attcttaaaa | taacctttca | ggtaggcatt | accaaccaca | 104040 |
| cattatcgaa | caaaacaaaa | gcctgatgtc | aggaggaagt | gccaaaggca | tgcagctaaa | 104100 |


```

tgactgagct agatttgaat cagcaatcct aacttcgagg ccagtgatat gtatgtaata 104160
tacttcatac ttttatttta ttccacttga ataaagtaga acagtatata ttatatgact 104220
taattattaa aatatacgag gtacatgttc tcataactgg taaggaaaca attttttcca 104280
gacaaatcta tttctagtca tcaagagatt gttttctaag aaaaatctga gcttcattat 104340
attcataaaa ggaattgcta agtttattct taaaaacttt acataatttc acaataattt 104400
aaaaaacagc aacaaaacag taattccagg gagaaatgaa cacctacctt atctaacagg 104460
tcgtaagctt tactaaggag cgcgcgccag aacttcacgg tgagtttgtc tgcgttcctt 104520
tccatggact gtgcaactgc actgatatag ccgagaacgg tctccagcaa cctgaaacac 104580
agaggctcgc tcagcaaacg gcagctgaag aaactcagag aacttgttca tgtctacctt 104640
atgctaaatg tttcaagtag aaagacgagt taaataattc tgtactaaat tatttcaaaa 104700
actactcgga aagaaaggaa atgagggatt attgccatag acagagatca tcaagaagta 104760
actagggcgt tctgtgcaga agcatcgacc tcgctcagac tctgtgaggt gctgaataag 104820
caacagatgc tgaaagcgtt taaggaaactc actcatatct agctcatgct cagtggatct 104880
cactgggctg tccaagtggg gtgttcaggg agttatggcc ctaggttaat ggcagggtgtg 104940
tgcgtgcaca cacacacagg cacacacacg cacacatata catgcacaca caccatacac 105000
catttatata aagagaaata ttaatagaaa tgaacatata acccacttct ttcacattat 105060
taggagacaa aaaaaaagac tacaaacttc aaataacttg taattagaaa agcacacacc 105120
aaattccaac acagctgcc a ctggagatcc cccactgct gccagcctga ggggggagct 105180
agagggaaga gtggagacag aagttgacac cgcacagcag aggaggggag aagggggcgc 105240
agacaaaatc agctccaaaa acgaaagtcc tacgcatagc gctacaagtc agcccacagg 105300
actggaactc agcagctcac attcctggct gcagggcagg cactttccag tggaaggggc 105360
aggacagtgg ccctgggaat gccatgcac tgaaaaggag gtacacagca aggccaggag 105420
gcaaaccctg aggcacatgg agagaaagga aaattcctgc acccaaatat ataattggcag 105480
catatggatt agaattccacg gaataaagaa ttcatgagcc catagaaatc agggccagat 105540
tgagacacta aacagatact gcaactcaat acaatacaca gacttgacat ggatcatgat 105600
gcagaaacac atgcggtgta aaggacagt ttgggataat tagggagact ggagtatgaa 105660
ctgtagatta catcactgga ttggatcaat gttaaatttt ctgaatttga tcaatgtact 105720
gtggttttat aagaacatct cttattctta gagacataat gtatatgatt tactttcaaa 105780
tggctcagag aaaaaaccct acatagggag aacgctaagg caaatgtggc agaaagtatt 105840
atcaaattgg gaacctgggt gttaaagagta tatgaatttt ctgtactgtt tttccagggt 105900
ttctataagt ttgaagtcat ttccaaataa aaagtaaaaa aagaaaagga aacataacct 105960
tcttcaaggc cttttaaaat ctcaggacca ccactctcaa ctacctaat tttaaagaag 106020
acgtcattag aacggtatgg aagtcaataa taaaagtcat ttcaagtcag ttcaatgaaa 106080
ctcggaccat tcaactgaaac cttccacagc aactgttttc tgacattaca atttaatcag 106140
gttcatagca tcttcattat actgtagtaa ctctatttct cttaatttat ttttaattata 106200
ttctactgg agtatctaaa aagtactaca atgggtcaga aaaatacagc aatcaaacact 106260
caattagcac taccgaattc tatgacatgc tgatctgggt agctcacata tcctttgttg 106320
agaagttaaa cattacagat tcagctggaa tcccccaagt actgctcctt ggtcctattc 106380
tcctctacc ccaagcccca caaacaacac catcatccca aatctgcttc caaatgtttc 106440
aaacactaca tatcacggaa caacatgttt ttctggaaac atatttttga gatctatgca 106500
tggtgactta tgttctagtt ccttcatttt aactgcata gatattcctc tataaatacc 106560
acttatctat ccatttgcct ctggtgttag atgttttagt tatgtccatt ttttccctt 106620
ttactaataa tgctagagaa gaacattttt atgtcccttt gatcatcttg ggaagttttt 106680
acagcatata tacctaagga agggaatgac cagatcacag gaattactgg aactttcaac 106740
ctcatg 106746

```

```

<210> 13
<211> 132
<212> PRT
<213> Homo sapiens

```

```

<220>
<221> MISC_FEATURE

```

<222> (1)..(132)

<223> amino acid sequence of leg2

<400> 13

```

Met Thr Gly Glu Leu Glu Val Lys Asn Met Asp Met Lys Pro Gly Ser
1           5           10           15
Thr Leu Lys Ile Thr Gly Ser Ile Ala Asp Gly Thr Asp Gly Phe Val
          20           25           30
Ile Asn Leu Gly Gln Gly Thr Asp Lys Leu Asn Leu His Phe Asn Pro
          35           40           45
Arg Phe Ser Glu Ser Thr Ile Val Cys Asn Ser Leu Asp Gly Ser Asn
          50           55           60
Trp Gly Gln Glu Gln Arg Glu Asp His Leu Cys Phe Ser Pro Gly Ser
65           70           75           80
Glu Val Lys Phe Thr Val Thr Phe Glu Ser Asp Lys Phe Lys Val Lys
          85           90           95
Leu Pro Asp Gly His Glu Leu Thr Phe Pro Asn Arg Leu Gly His Ser
          100          105          110
His Leu Ser Tyr Leu Ser Val Arg Gly Gly Phe Asn Met Ser Ser Phe
          115          120          125
Lys Leu Lys Glu
          130

```

<210> 14

<211> 134

<212> PRT

<213> Homo sapiens

<220>

<221> MISC_FEATURE

<222> (1)..(134)

<223> amino acid sequence of leg1

<400> 14

```

Ala Cys Gly Leu Val Ala Ser Asn Leu Asn Leu Lys Pro Gly Glu Cys
1           5           10           15
Leu Arg Val Arg Gly Glu Val Ala Pro Asp Ala Lys Ser Phe Val Leu
          20           25           30
Asn Leu Gly Lys Asp Ser Asn Asn Leu Cys Leu His Phe Asn Pro Arg
          35           40           45
Phe Asn Ala His Gly Asp Ala Asn Thr Ile Val Cys Asn Ser Lys Asp
          50           55           60
Gly Gly Ala Trp Gly Thr Glu Gln Arg Glu Ala Val Phe Pro Phe Gln
65           70           75           80
Pro Gly Ser Val Ala Glu Val Cys Ile Thr Phe Asp Gln Ala Asn Leu
          85           90           95
Thr Val Lys Leu Pro Asp Gly Tyr Glu Phe Lys Phe Pro Asn Arg Leu
          100          105          110
Asn Leu Glu Ala Ile Asn Tyr Met Ala Ala Asp Gly Asp Phe Lys Ile
          115          120          125
Lys Cys Val Ala Phe Asp
          130

```

<210> 15
 <211> 316
 <212> PRT
 <213> Homo sapiens

<220>
 <221> MISC_FEATURE
 <222> (1)..(316)
 <223> amino acid sequence of PCTA

<400> 15
 Met Leu Ser Leu Asn Asn Leu Gln Asn Ile Ile Tyr Asn Pro Val Ile
 1 5 10 15
 Pro Tyr Val Gly Thr Ile Pro Asp Gln Leu Asp Pro Gly Thr Leu Ile
 20 25 30
 Val Ile Cys Gly His Val Pro Ser Asp Ala Asp Arg Phe Gln Val Asp
 35 40 45
 Leu Gln Asn Gly Ser Ser Val Lys Pro Arg Ala Asp Val Ala Phe His
 50 55 60
 Phe Asn Pro Arg Phe Lys Arg Ala Gly Cys Ile Val Cys Asn Thr Leu
 65 70 75 80
 Ile Asn Glu Lys Trp Gly Arg Glu Glu Ile Thr Tyr Asp Thr Pro Phe
 85 90 95
 Lys Arg Glu Lys Ser Phe Glu Ile Val Ile Met Val Leu Lys Asp Lys
 100 105 110
 Phe Gln Val Ala Val Asn Gly Lys His Thr Leu Leu Tyr Gly His Arg
 115 120 125
 Ile Gly Pro Glu Lys Ile Asp Thr Leu Gly Ile Tyr Gly Lys Val Asn
 130 135 140
 Ile His Ser Ile Gly Phe Ser Phe Ser Ser Asp Leu Gln Ser Thr Gln
 145 150 155 160
 Ala Ser Ser Leu Glu Leu Thr Glu Ile Ser Arg Glu Asn Val Pro Lys
 165 170 175
 Ser Gly Thr Pro Gln Leu Ser Leu Pro Phe Ala Ala Arg Leu Asn Thr
 180 185 190
 Pro Met Gly Pro Gly Arg Thr Val Val Val Lys Gly Glu Val Asn Ala
 195 200 205
 Asn Ala Lys Ser Phe Asn Val Asp Leu Leu Ala Gly Lys Ser Lys Asp
 210 215 220
 Ile Ala Leu His Leu Asn Pro Arg Leu Asn Ile Lys Ala Phe Val Arg
 225 230 235 240
 Asn Ser Phe Leu Gln Glu Ser Trp Gly Glu Glu Glu Arg Asn Ile Thr
 245 250 255
 Ser Phe Pro Phe Ser Pro Gly Met Tyr Phe Glu Met Ile Ile Tyr Cys
 260 265 270
 Asp Val Arg Glu Phe Lys Val Ala Val Asn Gly Val His Ser Leu Glu
 275 280 285
 Tyr Lys His Arg Phe Lys Glu Leu Ser Ser Ile Asp Thr Leu Glu Ile
 290 295 300
 Asn Gly Asp Ile His Leu Leu Glu Val Arg Ser Trp
 305 310 315

<210> 16
 <211> 358

<212> PRT
 <213> Homo sapiens

<220>
 <221> MISC_FEATURE
 <222> (1)..(358)
 <223> amino acid sequence of PCTA.var

```

<400> 16
Met Leu Ser Leu Asn Asn Leu Gln Asn Ile Ile Tyr Asn Pro Val Ile
1          5          10          15
Pro Tyr Val Gly Thr Ile Pro Asp Gln Leu Asp Pro Gly Thr Leu Ile
          20          25          30
Val Ile Cys Gly His Val Pro Ser Asp Ala Asp Arg Phe Gln Val Asp
          35          40          45
Leu Gln Asn Gly Ser Ser Val Lys Pro Arg Ala Asp Val Ala Phe His
          50          55          60
Phe Asn Pro Arg Phe Lys Arg Ala Gly Cys Ile Val Cys Asn Thr Leu
65          70          75          80
Ile Asn Glu Lys Trp Gly Arg Glu Glu Ile Thr Tyr Asp Thr Pro Phe
          85          90          95
Lys Arg Glu Lys Ser Phe Glu Ile Val Ile Met Val Leu Lys Asp Lys
          100          105          110
Phe Gln Val Ala Val Asn Gly Lys His Thr Leu Leu Tyr Gly His Arg
          115          120          125
Ile Gly Pro Glu Lys Ile Asp Thr Leu Gly Ile Tyr Gly Lys Val Asn
          130          135          140
Ile His Ser Ile Gly Phe Ser Phe Ser Ser Asp Leu Gln Ser Thr Gln
145          150          155          160
Ala Ser Ser Leu Glu Leu Thr Glu Ile Ser Arg Glu Asn Val Pro Lys
          165          170          175
Ser Gly Thr Pro Gln Leu Pro Ser Asn Arg Gly Gly Asp Ile Ser Lys
          180          185          190
Ile Ala Pro Arg Thr Val Tyr Thr Lys Ser Lys Asp Ser Thr Val Asn
          195          200          205
His Thr Leu Thr Cys Thr Lys Ile Pro Pro Met Asn Tyr Val Ser Lys
          210          215          220
Ser Leu Pro Phe Ala Ala Arg Leu Asn Thr Pro Met Gly Pro Gly Arg
225          230          235          240
Thr Val Val Val Lys Gly Glu Val Asn Ala Asn Ala Lys Ser Phe Asn
          245          250          255
Val Asp Leu Leu Ala Gly Lys Ser Lys Asp Ile Ala Leu His Leu Asn
          260          265          270
Pro Arg Leu Asn Ile Lys Ala Phe Val Arg Asn Ser Phe Leu Gln Glu
          275          280          285
Ser Trp Gly Glu Glu Glu Arg Asn Ile Thr Ser Phe Pro Phe Ser Pro
          290          295          300
Gly Met Tyr Phe Glu Met Ile Ile Tyr Cys Asp Val Arg Glu Phe Lys
305          310          315          320
Val Ala Val Asn Gly Val His Ser Leu Glu Tyr Lys His Arg Phe Lys
          325          330          335
Glu Leu Ser Ser Ile Asp Thr Leu Glu Ile Asn Gly Asp Ile His Leu
          340          345          350
Leu Glu Val Arg Ser Trp
          355

```

<210> 17
 <211> 315
 <212> PRT
 <213> Mus musculus

<220>
 <221> MISC_FEATURE
 <222> (1)..(315)
 <223> amino acid sequence of PCTA.mus

<400> 17
 Met Leu Ser Leu Asn Asn Leu Gln Asn Ile Ile Tyr Asn Pro Ile Ile
 1 5 10 15
 Pro Tyr Val Gly Thr Ile Thr Glu Gln Leu Lys Pro Gly Ser Leu Ile
 20 25 30
 Val Ile Arg Gly His Val Pro Lys Asp Ser Glu Arg Phe Gln Val Asp
 35 40 45
 Phe Gln Leu Gly Asn Ser Leu Lys Pro Arg Ala Asp Val Ala Phe His
 50 55 60
 Phe Asn Pro Arg Phe Lys Arg Ser Ser Cys Ile Val Cys Asn Thr Leu
 65 70 75 80
 Thr Gln Glu Lys Trp Gly Trp Glu Glu Ile Thr Tyr Asp Met Pro Phe
 85 90 95
 Arg Lys Glu Lys Ser Phe Glu Ile Val Phe Met Val Leu Lys Asn Lys
 100 105 110
 Phe Gln Val Ala Val Asn Gly Arg His Val Leu Leu Tyr Ala His Arg
 115 120 125
 Ile Ser Pro Glu Gln Ile Asp Thr Val Gly Ile Tyr Gly Lys Val Asn
 130 135 140
 Ile His Ser Ile Gly Phe Arg Phe Ser Ser Asp Leu Gln Ser Met Glu
 145 150 155 160
 Thr Ser Ala Leu Gly Leu Thr Gln Ile Asn Arg Glu Asn Ile Gln Lys
 165 170 175
 Pro Gly Lys Leu Gln Leu Ser Leu Pro Phe Glu Ala Arg Leu Asn Ala
 180 185 190
 Ser Met Gly Pro Gly Arg Thr Val Val Ile Lys Gly Glu Val Asn Thr
 195 200 205
 Asn Ala Arg Ser Phe Asn Val Asp Leu Val Ala Gly Lys Thr Arg Asp
 210 215 220
 Ile Ala Leu His Leu Asn Pro Arg Leu Asn Lys Ala Phe Val Arg Asn
 225 230 235 240
 Ser Phe Leu Gln Asp Ala Trp Gly Glu Glu Glu Arg Asn Ile Thr Cys
 245 250 255
 Phe Pro Phe Ser Ser Gly Met Tyr Phe Glu Met Ile Ile Tyr Cys Asp
 260 265 270
 Val Arg Glu Phe Lys Val Ala Ile Asn Gly Val His Ser Leu Glu Tyr
 275 280 285
 Lys His Arg Phe Lys Asp Leu Ser Ser Ile Asp Thr Leu Ser Val Asp
 290 295 300
 Gly Asp Ile Arg Leu Leu Asp Val Arg Ser Trp
 305 310 315

<210> 18
 <211> 355
 <212> PRT
 <213> Homo sapiens

<220>
 <221> MISC_FEATURE
 <222> (1)..(355)
 <223> amino acid sequence of gal9-1

<400> 18
 Met Ala Phe Ser Gly Ser Gln Ala Pro Tyr Leu Ser Pro Ala Val Pro
 1 5 10 15
 Phe Ser Gly Thr Ile Gln Gly Gly Leu Gln Asp Gly Leu Gln Ile Thr
 20 25 30
 Val Asn Gly Thr Val Leu Ser Ser Ser Gly Thr Arg Phe Ala Val Asn
 35 40 45
 Phe Gln Thr Gly Phe Ser Gly Asn Asp Ile Ala Phe His Phe Asn Pro
 50 55 60
 Arg Phe Glu Asp Gly Gly Tyr Val Val Cys Asn Thr Arg Gln Asn Gly
 65 70 75 80
 Ser Trp Gly Pro Glu Arg Lys Thr His Met Pro Phe Gln Lys Gly
 85 90 95
 Met Pro Phe Asp Leu Cys Phe Leu Val Gln Ser Ser Asp Phe Lys Val
 100 105 110
 Met Val Asn Gly Ile Leu Phe Val Gln Tyr Phe His Arg Val Pro Phe
 115 120 125
 His Arg Val Asp Thr Ile Ser Val Asn Gly Ser Val Gln Leu Ser Tyr
 130 135 140
 Ile Ser Phe Gln Asn Pro Arg Thr Val Pro Val Gln Pro Ala Phe Ser
 145 150 155 160
 Thr Val Pro Phe Ser Gln Pro Val Cys Phe Pro Pro Arg Pro Arg Gly
 165 170 175
 Arg Arg Gln Lys Pro Pro Gly Val Trp Pro Ala Asn Pro Ala Pro Ile
 180 185 190
 Thr Gln Thr Val Ile His Thr Val Gln Ser Ala Pro Gly Gln Met Phe
 195 200 205
 Ser Thr Pro Ala Ile Pro Pro Met Met Tyr Pro His Pro Ala Tyr Pro
 210 215 220
 Met Pro Phe Ile Thr Thr Ile Leu Gly Gly Leu Tyr Pro Ser Lys Ser
 225 230 235 240
 Ile Leu Leu Ser Gly Thr Val Leu Pro Ser Ala Gln Arg Phe His Ile
 245 250 255
 Asn Leu Cys Ser Gly Asn His Ile Ala Phe His Leu Asn Pro Arg Phe
 260 265 270
 Asp Glu Asn Ala Val Val Arg Asn Thr Gln Ile Asp Asn Ser Trp Gly
 275 280 285
 Ser Glu Glu Arg Ser Leu Pro Arg Lys Met Pro Phe Val Arg Gly Gln
 290 295 300
 Ser Phe Ser Val Trp Ile Leu Cys Glu Ala His Cys Leu Lys Val Ala
 305 310 315 320
 Val Asp Gly Gln His Leu Phe Glu Tyr Tyr His Arg Leu Arg Asn Leu
 325 330 335
 Pro Thr Ile Asn Arg Leu Glu Val Gly Gly Asp Ile Gln Leu Thr His
 340 345 350

Val Gln Thr
355

<210> 19
<211> 323
<212> PRT
<213> Homo sapiens

<220>
<221> MISC_FEATURE
<222> (1)..(323)
<223> amino acid sequence of gal

<400> 19
Met Ala Phe Ser Gly Ser Gln Ala Pro Tyr Leu Ser Pro Ala Val Pro
1 5 10 15
Phe Ser Gly Thr Ile Gln Gly Gly Leu Gln Asp Gly Leu Gln Ile Thr
20 25 30
Val Asn Gly Thr Val Leu Ser Ser Gly Thr Arg Phe Ala Val Asn
35 40 45
Phe Gln Thr Gly Phe Ser Gly Asn Asp Ile Ala Phe His Phe Asn Pro
50 55 60
Arg Phe Glu Asp Gly Gly Tyr Val Val Cys Asn Thr Arg Gln Asn Gly
65 70 75 80
Ser Trp Gly Pro Glu Glu Arg Arg Thr His Met Pro Phe Gln Lys Gly
85 90 95
Met Pro Phe Asp Leu Cys Phe Leu Val Gln Ser Ser Asp Phe Lys Val
100 105 110
Met Val Asn Gly Ile Leu Phe Val Gln Tyr Phe His Arg Val Pro Phe
115 120 125
His Arg Val Asp Thr Ile Phe Val Asn Gly Ser Val Gln Leu Ser Tyr
130 135 140
Ile Ser Phe Gln Pro Pro Gly Val Trp Pro Ala Asn Pro Ala Pro Ile
145 150 155 160
Thr Gln Thr Val Ile His Thr Val Gln Ser Ala Pro Gly Gln Met Phe
165 170 175
Ser Thr Pro Ala Ile Pro Pro Met Met Tyr Pro His Pro Ala Tyr Pro
180 185 190
Met Pro Phe Ile Thr Thr Ile Leu Gly Gly Leu Tyr Pro Ser Lys Ser
195 200 205
Ile Leu Leu Ser Gly Thr Val Leu Pro Ser Ala Gln Arg Phe His Ile
210 215 220
Asn Leu Cys Ser Gly Asn His Ile Ala Phe His Leu Asn Leu Arg Phe
225 230 235 240
Asp Glu Asn Ala Val Val Arg Asn Thr Gln Ile Asp Asn Ser Trp Gly
245 250 255
Ser Glu Glu Arg Ser Leu Pro Arg Lys Met Pro Phe Val Arg Gly Gln
260 265 270
Ser Phe Ser Val Trp Ile Leu Cys Gly Ala His Cys Leu Lys Val Ala
275 280 285
Val Asp Gly Gln His Leu Phe Glu Tyr Tyr His Arg Leu Arg Asn Leu
290 295 300
Pro Thr Ile Asn Arg Leu Glu Val Gly Gly Asp Ile Gln Leu Thr His
305 310 315 320

Val Gln Thr

<210> 20
 <211> 135
 <212> PRT
 <213> Homo sapiens

<220>
 <221> MISC_FEATURE
 <222> (1)..(135)
 <223> amino acid sequence of leg7

<400> 20
 Ser Asn Val Pro His Lys Ser Ser Leu Pro Glu Gly Ile Arg Pro Gly
 1 5 10 15
 Thr Val Leu Arg Ile Arg Gly Leu Val Pro Pro Asn Ala Ser Arg Phe
 20 25 30
 His Val Asn Leu Leu Cys Gly Glu Gln Gly Ser Asp Ala Ala Leu
 35 40 45
 His Phe Asn Pro Arg Leu Asp Thr Ser Glu Val Val Phe Asn Ser Lys
 50 55 60
 Glu Gln Gly Ser Trp Gly Arg Glu Glu Arg Gly Pro Gly Val Pro Phe
 65 70 75 80
 Gln Arg Gly Gln Pro Phe Glu Val Leu Ile Ile Ala Ser Asp Asp Gly
 85 90 95
 Phe Lys Ala Val Val Gly Asp Ala Gln Tyr His His Phe Arg His Arg
 100 105 110
 Leu Pro Leu Ala Arg Val Arg Leu Val Glu Val Gly Gly Asp Val Gln
 115 120 125
 Leu Asp Ser Val Arg Ile Phe
 130 135

<210> 21
 <211> 323
 <212> PRT
 <213> Homo sapiens

<220>
 <221> MISC_FEATURE
 <222> (1)..(323)
 <223> amino acid sequence of gal4

<400> 21
 Met Ala Tyr Val Pro Ala Pro Gly Tyr Gln Pro Thr Tyr Asn Pro Thr
 1 5 10 15
 Leu Pro Tyr Tyr Gln Pro Ile Pro Gly Gly Leu Asn Val Gly Met Ser
 20 25 30
 Val Tyr Ile Gln Gly Val Ala Ser Glu His Met Lys Arg Phe Phe Val
 35 40 45
 Asn Phe Val Val Gly Gln Asp Pro Gly Ser Asp Val Ala Phe His Phe
 50 55 60
 Asn Pro Arg Phe Asp Gly Trp Asp Lys Val Val Phe Asn Thr Leu Gln
 65 70 75 80


```

Gly Gly Lys Trp Gly Ser Glu Glu Arg Lys Arg Ser Met Pro Phe Lys
      85                      90                      95
Lys Gly Ala Ala Phe Glu Leu Val Phe Ile Val Leu Ala Glu His Tyr
      100                      105                      110
Lys Val Val Val Asn Gly Asn Pro Phe Tyr Glu Tyr Gly His Arg Leu
      115                      120                      125
Pro Leu Gln Met Val Thr His Leu Gln Val Asp Gly Asp Leu Gln Leu
      130                      135                      140
Gln Ser Ile Asn Phe Ile Gly Gly Gln Pro Leu Arg Pro Gln Gly Pro
      145                      150                      155                      160
Pro Met Met Pro Pro Tyr Pro Gly Pro Gly His Cys His Gln Gln Leu
      165                      170                      175
Asn Ser Leu Pro Thr Met Glu Gly Pro Pro Thr Phe Asn Pro Pro Val
      180                      185                      190
Pro Tyr Phe Gly Arg Leu Gln Gly Gly Leu Thr Ala Arg Arg Thr Ile
      195                      200                      205
Ile Ile Lys Gly Tyr Val Pro Pro Thr Gly Lys Ser Phe Ala Ile Asn
      210                      215                      220
Phe Lys Val Gly Ser Ser Gly Asp Ile Ala Leu His Ile Asn Pro Arg
      225                      230                      235                      240
Met Gly Asn Gly Thr Val Val Arg Asn Ser Leu Leu Asn Gly Ser Trp
      245                      250                      255
Gly Ser Glu Glu Lys Lys Ile Thr His Asn Pro Phe Gly Pro Gly Gln
      260                      265                      270
Phe Phe Asp Leu Ser Ile Arg Cys Gly Leu Asp Arg Phe Lys Val Tyr
      275                      280                      285
Ala Asn Gly Gln His Leu Phe Asp Phe Ala His Arg Leu Ser Ala Phe
      290                      295                      300
Gln Arg Val Asp Thr Leu Glu Ile Gln Gly Asp Val Thr Leu Ser Tyr
      305                      310                      315                      320
Val Gln Ile

```

```

<210> 22
<211> 466
<212> PRT
<213> Artificial Sequence

```

```

<220>
<223> conserved sequence among SEQ ID NOs. 13-21

```

```

<220>
<221> MISC_FEATURE
<222> (1)..(113)
<223> Xaa = no consensus amino acid found among sequences

```

```

<220>
<221> MISC_FEATURE
<222> (115)..(116)
<223> Xaa = no consensus amino acid found among sequences

```

```

<220>
<221> MISC_FEATURE
<222> (118)..(121)
<223> Xaa = no consensus amino acid found among sequences

```

<220>
<221> MISC_FEATURE
<222> (124)..(124)
<223> Xaa = no consensus amino acid found among sequences

<220>
<221> MISC_FEATURE
<222> (127)..(127)
<223> Xaa = no consensus amino acid found among sequences

<220>
<221> MISC_FEATURE
<222> (130)..(133)
<223> Xaa = no consensus amino acid found among sequences

<220>
<221> MISC_FEATURE
<222> (135)..(135)
<223> Xaa = no consensus amino acid found among sequences

<220>
<221> MISC_FEATURE
<222> (137)..(137)
<223> Xaa = no consensus amino acid found among sequences

<220>
<221> MISC_FEATURE
<222> (139)..(139)
<223> Xaa = no consensus amino acid found among sequences

<220>
<221> MISC_FEATURE
<222> (141)..(142)
<223> Xaa = no consensus amino acid found among sequences

<220>
<221> MISC_FEATURE
<222> (144)..(144)
<223> Xaa = no consensus amino acid found among sequences

<220>
<221> MISC_FEATURE
<222> (147)..(147)
<223> Xaa = no consensus amino acid found among sequences

<220>
<221> MISC_FEATURE
<222> (151)..(152)
<223> Xaa = no consensus amino acid found among sequences

<220>
<221> MISC_FEATURE
<222> (154)..(158)
<223> Xaa = no consensus amino acid found among sequences

<220>
<221> MISC_FEATURE
<222> (160)..(160)
<223> Xaa = no consensus amino acid found among sequences

<220>
<221> MISC_FEATURE
<222> (162)..(162)
<223> Xaa = no consensus amino acid found among sequences

<220>
<221> MISC_FEATURE
<222> (171)..(178)
<223> Xaa = no consensus amino acid found among sequences

<220>
<221> MISC_FEATURE
<222> (184)..(186)
<223> Xaa = no consensus amino acid found among sequences

<220>
<221> MISC_FEATURE
<222> (188)..(188)
<223> Xaa = no consensus amino acid found among sequences

<220>
<221> MISC_FEATURE
<222> (191)..(191)
<223> Xaa = no consensus amino acid found among sequences

<220>
<221> MISC_FEATURE
<222> (195)..(198)
<223> Xaa = no consensus amino acid found among sequences

<220>
<221> MISC_FEATURE
<222> (201)..(202)
<223> Xaa = no consensus amino acid found among sequences

<220>
<221> MISC_FEATURE
<222> (204)..(205)
<223> Xaa = no consensus amino acid found among sequences

<220>
<221> MISC_FEATURE
<222> (208)..(211)
<223> Xaa = no consensus amino acid found among sequences

<220>
<221> MISC_FEATURE
<222> (213)..(214)
<223> Xaa = no consensus amino acid found among sequences

<220>
<221> MISC_FEATURE
<222> (216)..(216)
<223> Xaa = no consensus amino acid found among sequences

<220>
<221> MISC_FEATURE
<222> (220)..(220)
<223> Xaa = no consensus amino acid found among sequences

<220>
<221> MISC_FEATURE
<222> (224)..(228)
<223> Xaa = no consensus amino acid found among sequences

<220>
<221> MISC_FEATURE
<222> (230)..(230)
<223> Xaa = no consensus amino acid found among sequences

<220>
<221> MISC_FEATURE
<222> (234)..(234)
<223> Xaa = no consensus amino acid found among sequences

<220>
<221> MISC_FEATURE
<222> (237)..(238)
<223> Xaa = no consensus amino acid found among sequences

<220>
<221> MISC_FEATURE
<222> (240)..(243)
<223> Xaa = no consensus amino acid found among sequences

<220>
<221> MISC_FEATURE
<222> (245)..(245)
<223> Xaa = no consensus amino acid found among sequences

<220>
<221> MISC_FEATURE
<222> (251)..(251)
<223> Xaa = no consensus amino acid found among sequences

<220>
<221> MISC_FEATURE
<222> (254)..(254)
<223> Xaa = no consensus amino acid found among sequences

<220>
<221> MISC_FEATURE
<222> (256)..(333)
<223> Xaa = no consensus amino acid found among sequences

<220>
<221> MISC_FEATURE
<222> (335)..(352)
<223> Xaa = no consensus amino acid found among sequences

<220>
<221> MISC_FEATURE
<222> (354)..(354)
<223> Xaa = no consensus amino acid found among sequences

<220>
<221> MISC_FEATURE
<222> (356)..(361)
<223> Xaa = no consensus amino acid found among sequences

<220>
<221> MISC_FEATURE
<222> (363)..(373)
<223> Xaa = no consensus amino acid found among sequences

<220>
<221> MISC_FEATURE
<222> (376)..(376)
<223> Xaa = no consensus amino acid found among sequences

<220>
<221> MISC_FEATURE
<222> (378)..(378)
<223> Xaa = no consensus amino acid found among sequences

<220>
<221> MISC_FEATURE
<222> (380)..(380)
<223> Xaa = no consensus amino acid found among sequences

<220>
<221> MISC_FEATURE
<222> (382)..(387)
<223> Xaa = no consensus amino acid found among sequences

<220>
<221> MISC_FEATURE
<222> (391)..(396)
<223> Xaa = no consensus amino acid found among sequences

<220>
<221> MISC_FEATURE
<222> (399)..(399)
<223> Xaa = no consensus amino acid found among sequences

<220>
<221> MISC_FEATURE
<222> (402)..(408)
<223> Xaa = no consensus amino acid found among sequences

<220>
<221> MISC_FEATURE
<222> (411)..(412)
<223> Xaa = no consensus amino acid found among sequences

<220>
<221> MISC_FEATURE
<222> (414)..(415)
<223> Xaa = no consensus amino acid found among sequences

<220>
<221> MISC_FEATURE
<222> (417)..(419)
<223> Xaa = no consensus amino acid found among sequences

<220>
<221> MISC_FEATURE
<222> (421)..(421)
<223> Xaa = no consensus amino acid found among sequences

<220>
<221> MISC_FEATURE
<222> (423)..(427)
<223> Xaa = no consensus amino acid found among sequences

<220>
<221> MISC_FEATURE
<222> (430)..(432)
<223> Xaa = no consensus amino acid found among sequences

<220>
<221> MISC_FEATURE
<222> (434)..(434)
<223> Xaa = no consensus amino acid found among sequences

<220>
<221> MISC_FEATURE
<222> (436)..(440)
<223> Xaa = no consensus amino acid found among sequences

<220>
<221> MISC_FEATURE
<222> (443)..(451)
<223> Xaa = no consensus amino acid found among sequences

<220>
<221> MISC_FEATURE
<222> (453)..(455)
<223> Xaa = no consensus amino acid found among sequences

<220>
<221> MISC_FEATURE
<222> (458)..(459)
<223> Xaa = no consensus amino acid found among sequences

<220>
 <221> MISC_FEATURE
 <222> (461)..(462)
 <223> Xaa = no consensus amino acid found among sequences

<220>
 <221> MISC_FEATURE
 <222> (464)..(466)
 <223> Xaa = no consensus amino acid found among sequences

<400> 22
 Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
 1 5 10 15
 Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
 20 25 30
 Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
 35 40 45
 Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
 50 55 60
 Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
 65 70 75 80
 Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
 85 90 95
 Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
 100 105 110
 Xaa Pro Xaa Xaa Pro Xaa Xaa Xaa Xaa Ile Pro Xaa Gly Leu Xaa Pro
 115 120 125
 Gly Xaa Xaa Xaa Xaa Ile Xaa Gly Xaa Val Xaa Pro Xaa Xaa Ala Xaa
 130 135 140
 Arg Phe Xaa Val Asn Leu Xaa Xaa Gly Xaa Xaa Xaa Xaa Xaa Gly Xaa
 145 150 155 160
 Asp Xaa Ala Phe His Phe Asn Pro Arg Phe Xaa Xaa Xaa Xaa Xaa Xaa
 165 170 175
 Xaa Xaa Val Val Cys Asn Thr Xaa Xaa Xaa Gly Xaa Trp Gly Xaa Glu
 180 185 190
 Glu Arg Xaa Xaa Xaa Xaa Pro Phe Xaa Xaa Gly Xaa Xaa Phe Glu Xaa
 195 200 205
 Xaa Xaa Xaa Val Xaa Xaa Asp Xaa Phe Lys Val Xaa Val Asn Gly Xaa
 210 215 220
 Xaa Xaa Xaa Xaa Tyr Xaa His Arg Leu Xaa Pro Leu Xaa Xaa Val Xaa
 225 230 235 240
 Xaa Xaa Xaa Val Xaa Gly Asp Val Gln Leu Xaa Ser Ile Xaa Phe Xaa
 245 250 255
 Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
 260 265 270
 Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
 275 280 285
 Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
 290 295 300
 Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
 305 310 315 320
 Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Pro Xaa Xaa
 325 330 335
 Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| | | | 340 | | | | | 345 | | | | 350 | | | |
| Gly | Xaa | Val | Xaa | Xaa | Xaa | Xaa | Xaa | Phe | Xaa | Xaa | Xaa | Xaa | Xaa | Xaa | Xaa |
| | | 355 | | | | | 360 | | | | 365 | | | | |
| Xaa | Xaa | Xaa | Xaa | Xaa | Ile | Ala | Xaa | His | Xaa | Asn | Xaa | Arg | Xaa | Xaa | Xaa |
| | 370 | | | | | 375 | | | | | 380 | | | | |
| Xaa | Xaa | Xaa | Val | Arg | Asn | Xaa | Xaa | Xaa | Xaa | Xaa | Xaa | Trp | Gly | Xaa | Glu |
| 385 | | | | | 390 | | | | | 395 | | | | | 400 |
| Glu | Xaa | Xaa | Xaa | Xaa | Xaa | Xaa | Xaa | Pro | Phe | Xaa | Xaa | Gly | Xaa | Xaa | Phe |
| | | | | 405 | | | | | 410 | | | | 415 | | |
| Xaa | Xaa | Xaa | Ile | Xaa | Cys | Xaa | Xaa | Xaa | Xaa | Xaa | Lys | Val | Xaa | Xaa | Xaa |
| | | | 420 | | | | | 425 | | | | | 430 | | |
| Gly | Xaa | His | Xaa | Xaa | Xaa | Xaa | Xaa | His | Arg | Xaa | Xaa | Xaa | Xaa | Xaa | Xaa |
| | | 435 | | | | | 440 | | | | | 445 | | | |
| Xaa | Xaa | Xaa | Leu | Xaa | Xaa | Xaa | Gly | Asp | Xaa | Xaa | Leu | Xaa | Xaa | Val | Xaa |
| | 450 | | | | | 455 | | | | | 460 | | | | |
| Xaa | Xaa | | | | | | | | | | | | | | |
| 465 | | | | | | | | | | | | | | | |